

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW MEXICO

CHEVRON MINING,

Plaintiff

vs.

No. 1:13-CV-00328 PJK/JFR

UNITED STATES OF AMERICA,  
UNITED STATES DEPARTMENT OF THE INTERIOR,  
UNITED STATES DEPARTMENT OF AGRICULTURE,

Defendants.

TRANSCRIPT OF PROCEEDINGS

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BEFORE: HONORABLE JUDGE PAUL KELLY  
UNITED STATES 10TH CIRCUIT JUDGE

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1 THE COURT: Good morning, you may be  
2 seated.

3 Where is our witness?

4 MR. TODD: Dr. Rigby is back there, Your  
5 Honor. I think we have one thing to take care of.

6 THE COURT: He is hiding back there?

7 MR. TODD: He will be called in a minute,  
8 Your Honor. We have one other item to deal with  
9 first, if that is okay.

10 MR. KIMBALL: Your Honor, we have not yet  
11 moved to admit the deposition designations. We just  
12 want to jointly move to admit the deposition  
13 designations into the record.

14 THE COURT: All right.

15 MR. TODD: Chevron recalls Dr. Rigby.

16 THE COURT: Okay. You are still under  
17 oath.

18 (Whereupon, the witness was previously  
19 sworn.)

20 THE COURT: You may proceed.

21 MR. KIMBALL: Thank you, Your Honor. All  
22 right. Can you hear me all right?

23 THE COURT: I'm sorry?

24 MS. KIMBALL: Can you hear me all right?

25 THE COURT: Go ahead.

1 CROSS-EXAMINATION (Continued)

2 BY MR. KIMBALL:

3 Q. Dr. Rigby, Chevron conducted a substantial  
4 amount of exploration after the end of the DMEA  
5 contract and before developing the open pit,  
6 correct?

7 A. Certainly did.

8 Q. And no Federal employee told Chevron how  
9 to conduct its privately-financed exploration,  
10 correct?

11 A. Not that I am aware of.

12 Q. Chevron did not consult with DMEA or any  
13 other Federal agency when developing the open pit,  
14 correct?

15 A. I am not in a position to really say. I  
16 don't know what they did.

17 Q. All right. Let's turn to your opinions  
18 regarding the Red River plan.

19 You testified that Chevron had an idea to  
20 dump its waste rock on top of the state highway and  
21 river in the Red River Canyon, correct?

22 A. I did.

23 Q. And the highway we are talking about is  
24 State Highway 38, correct?

25 A. It is.

1           Q.     And the river is the Red River, correct?

2           A.     Yes.

3                   MS. KIMBALL:  Let's pull up U.S. Demo 03.

4           Q.     (By Ms. Kimball)  Do you recognize this  
5     image as the image of the mine as it is today?

6           A.     I believe so, yes.

7           Q.     And can you just identify on this drawing  
8     where the Red River fill plan would be.

9                   So it would run the entire length from  
10    Columbine Canyon down to the mill facility, correct?

11          A.     What was the question?

12          Q.     Your plan would run from Columbine Canyon  
13    down to the mill facility?

14          A.     Not necessarily.  That is the route, the  
15    relevant place.  You see the front piles on the  
16    right-hand side there, but my own belief, the  
17    designs, the concepts that we came up with, it was  
18    never defined how long that tunnel, culvert would  
19    need to be, there is so much flexibility in the  
20    design.

21                 You know, maybe I think I said in my  
22    report a half a mile.  It could have been a quarter  
23    of a mile, it could have been -- you know, the  
24    minimum would have been 150 feet if you just needed  
25    a bridge to cross the 38 and the Red River.  So we

1 give examples of what it would look like and some  
2 alternative lengths, but that was never finalized  
3 because the concept was basically killed.

4 **Q. And so you have never actually seen any**  
5 **engineering plans for what they were planning to do,**  
6 **correct?**

7 A. I heard yesterday that some did exist but,  
8 unfortunately, I haven't seen any other than the  
9 ones that we prepared.

10 **Q. You have never seen anything that Molycorp**  
11 **prepared?**

12 A. No.

13 **Q. And you have never seen any evidence that**  
14 **they presented any plans to the Forest Service?**

15 A. Not that I am aware of.

16 **Q. And how tall would the valley fill have**  
17 **needed to have been?**

18 A. Again, if you read my report, I do discuss  
19 the flexibility that one had. And in terms of, I  
20 mean, we have a volume that we need to dispose of,  
21 maybe 350 million tons or thereabouts, but you have  
22 got so many different dimensions. You have got both  
23 sides of the valley, and therefore -- and the  
24 dimensions that you could use with that volume and  
25 that tonnage really would depend upon -- because I

1 believe in progressive restoration, you would  
2 basically build the waste-rock dumps with a view to  
3 a final landfall and a final restored surface.

4 And therefore not having been finalized,  
5 my point is you could have placed the waste-rock to  
6 replicate the topography in the region so that  
7 post-reclamation and restoration with trees, scrub,  
8 et cetera, et cetera, you really wouldn't know that  
9 that was actually waste-rock dump.

10 **Q. And all of this is your, you're theorizing**  
11 **about what could have happened, not anything that**  
12 **Molycorp had actually planned. You have never seen**  
13 **any plans that they --**

14 THE COURT: He has already answered that  
15 question.

16 **Q (By Mr. Kimball) Okay. But you have never**  
17 **seen anything from Molycorp that shows that they**  
18 **were planning to do --**

19 THE COURT: He already answered that  
20 question, too. We are going to have to move this  
21 along, so try not to repeat yourself.

22 MS. KIMBALL: Okay. I'm sorry.

23 **Q (By Mr. Kimball) Chevron did not own the**  
24 **land with the state highway on it, correct?**

25 A. I don't believe so.



1           **Q.       The Forest Service owned that land and**  
2           **New Mexico had an easement for that highway?**

3           A.       I believe so.

4           **Q.       And Chevron would have needed permission**  
5           **from both the Forest Service and New Mexico in order**  
6           **to tunnelize the highway?**

7                   MR. TODD:  Objection, Your Honor, calls  
8           for a legal conclusion.  I don't know that  
9           Dr. Rigby, is here as a -- well, he is not here as  
10          an expert in land use law or state law.

11                   THE COURT:  He can say that.

12          A.       Could you repeat the question then,  
13          please.

14          **Q        (By Mr. Kimball) Would Chevron have needed**  
15          **permission from the Forest Service and the State of**  
16          **New Mexico to tunnelize the highway?**

17          A.       I don't know, but I would assume possibly,  
18          yes.

19          **Q.       And Chevron did not own the river?**

20          A.       No.

21          **Q.       The State of New Mexico owned the river?**

22          A.       I believe.

23          **Q.       And so they also would have needed**  
24          **permission from the State of New Mexico to tunnelize**  
25          **the river?**

1           A.       I would assume so.

2           **Q.       And as we sit here today you have never**  
3           **seen any evidence that they ever broached this issue**  
4           **with the State of New Mexico?**

5           A.       I think, as I indicated earlier, the  
6           project never advanced that far, unfortunately.

7           **Q.       But if they did not have permission to go**  
8           **over the river, they never could have done this plan**  
9           **either, correct?**

10          A.       I would have hoped so, yes.

11          **Q.       And the State of New Mexico had already**  
12          **been concerned about the impact the mine was having**  
13          **on the river, correct?**

14          A.       I am not sure.

15               MS. KIMBALL: Mr. Hambrick, could you pull  
16               up CX209, which has previously been admitted?

17               THE COURT: What was that again?

18               MS. KIMBALL: CX209.

19               THE COURT: Okay.

20          **Q.       (By Ms. Kimball) Dr. Rigby, this --**

21               MR. TODD: Your Honor, objection.

22               THE COURT: State your objection.

23               MR. TODD: I am going to sit back down, if  
24               that's okay, so you can hear me, Your Honor.

25               THE COURT: I can hardly understand you.

1 MR. TODD: I apologize for sitting. Your  
2 Honor, I gave Ms. Kimball some leeway yesterday in  
3 raising environmental issues. We do have a  
4 stipulation dealing with environmental issues. This  
5 is about the third or fourth time that she has asked  
6 about this with this witness.

7 I object to this line of testimony. The  
8 impact to the river has nothing to do with the  
9 allocation issues, perspective issues before the  
10 Court today. That is for the third phase.

11 THE COURT: Sustained.

12 MR. KIMBALL: Your Honor, if I may. I am  
13 bringing this up only to point out the --

14 THE COURT: No. We have a stipulation. I  
15 have got it right here, if you need a copy of it.

16 Q (By Mr. Kimball) Dr. Rigby, you have never  
17 seen any evidence that Molycorp had discussed the  
18 impact that the Red River plan would have on the --  
19 that the dump fill itself would have on the river?

20 THE COURT: Counsel, we have been down  
21 that road. Now I want you to move on.

22 Q (By Mr. Kimball) Dr. Rigby, you opined  
23 filling the river with waste-rock could have been an  
24 economically superior option, correct?

25 A. Yes.

1           **Q.       And you estimate that the Red River dump**  
2     **idea would have cost approximately \$2.4 million,**  
3     **correct?**

4           A.       An indicative cost, yes.

5           **Q.       And the land exchange cost Chevron**  
6     **approximately \$85,000, correct?**

7           A.       I believe so.

8           **Q.       And your estimate for 2.4 million only**  
9     **estimates the cost of the steel for the tunnel,**  
10    **correct?**

11          A.       It was a cost of culverts based on a  
12    quotation from an engineering company for a similar  
13    structure which would have been used for another  
14    internal waste dump on the erection site on the pit,  
15    which is where they erected the shovels and that  
16    would require access, maintenance of access for haul  
17    trucks.

18                I thought that was a good indicator  
19    because that dump would probably have been much  
20    higher than what you envisioned in the Red River  
21    Valley waste disposal concept.

22          **Q.       It was only for the steel and the**  
23    **construction materials for the culverts themselves?**

24          A.       It was basically everything for the  
25    culvert.

1           **Q.       Did it include the labor for the culvert?**

2           A.       I believe it was an all-in cost.

3           **Q.       And the haulage tunnel that you were**  
4 **basing this on, that wasn't going to be over a**  
5 **public highway, correct?**

6           A.       It was an internal access road used by  
7 these enormous haul trucks.

8           **Q.       And a dry haulage culvert doesn't have to**  
9 **accommodate vehicles traveling highways, correct?**

10          A.       Oh, yes, there are certain restrictions on  
11 mines in terms of speed limits.

12          **Q.       Right. So there aren't the same -- they**  
13 **are not traveling the same speed as you travel on**  
14 **the highway, correct, as cars travel on the highway?**

15          A.       Well, I think and it is like my earlier  
16 response because the concept was flatly refused by  
17 the Forest Service, vigorously opposed, I think the  
18 term was, that this detail was never really gotten  
19 into. And I suspect if it had gone forward, there  
20 would have been some additional speed restrictions  
21 within the culvert of R38.

22          **Q.       You think the state highway tunnel would**  
23 **have been reduced in speed?**

24          A.       I would say that would have been one  
25 consideration.

1           Q.       Okay. But you haven't seen anything from  
2   Molycorp evidencing --

3                   THE COURT: Counsel, he has already  
4   testified he has seen nothing.

5           Q        (By Mr. Kimball) You also opined that the  
6   Red River plan was technically feasible. Dr. Rigby,  
7   the tailings pipeline runs along the same route that  
8   you had planned for the Red River fill plan,  
9   correct?

10          A.       It does indeed.

11                  MS. KIMBALL: And, Mr. Hambrick, could you  
12   pull up USX373, which has previously been admitted.

13          Q.        (By Ms. Kimball) This shows the route of  
14   the tailings pipeline, correct?

15          A.       Yes, I believe so.

16          Q.        It is running the full length of the mine?

17                  MR. KIMBALL: I think there is an issue  
18   with what documents are being pulled up. The Clerk  
19   needs to switch the screen to show from the defense  
20   exhibits.

21                  Thank you.

22          Q        (By Mr. Kimball) All right. This shows the  
23   tailings pipeline that runs along the mine, correct?

24          A.       Well, it runs along the southern boundary  
25   of the mine, yes.

1           **Q.       It runs along the river and the highway**  
2           **the entire length, right?**

3           A.       The logical place to locate it.

4                   MS. KIMBALL:   And if we could turn to  
5           CX432.

6           **Q.       (By Ms. Kimball)   This shows your three**  
7           **markups of the potential valley fill idea, correct?**

8           A.       Those are three markups, just examples of  
9           what it could look like, certainly not a  
10          recommendation.

11                   THE COURT:   Let me interrupt you for a  
12          minute.   What has this got to do with anything that  
13          we are dealing with today?   Anything?

14                   MR. KIMBALL:   Well, Chevron has --

15                   THE COURT:   Well, they said that it never  
16          got beyond the discussion and it was quenched right  
17          away.   So why do we even have to get into the  
18          details?   How is it relevant?   If you can show me  
19          relevance, you can go do it.

20                   MR. KIMBALL:   Well, Chevron has asserted  
21          that the United States is liable for the rock piles  
22          because they could have -- there was this  
23          possibility --

24                   THE COURT:   That is hardly an issue.

25                   MS. KIMBALL:   Okay.

1           THE COURT: We are here to allocate based  
2     upon the fact that the Government is deemed to be a  
3     potentially responsible party by the Tenth Circuit.  
4     And we have covered this and covered it and covered  
5     it. You could cover the river with it, and so I  
6     would like to move on or we are going to be here for  
7     months.

8           MR. KIMBALL: Thank you, Your Honor.

9           **Q     (By Mr. Kimball) Dr. Rigby, regardless of**  
10    **whether Chevron may have preferred an option other**  
11    **than the waste-rock piles that it has already**  
12    **created, they did, in fact, seek and obtain**  
13    **ownership over their own waste-rock piles, correct?**

14        A.     By way of the land exchange, yes.

15        **Q.     And they have had exclusive ownership of**  
16    **those waste-rock piles for the past 50 years,**  
17    **correct?**

18        A.     '74 to now, almost.

19        **Q.     So about 50 years?**

20        A.     Yes.

21           MR. KIMBALL: No further questions,  
22    Your Honor.

23           THE COURT: You may redirect.

24

25



1 REDIRECT EXAMINATION

2 BY MR. TODD:

3 Q. Good morning, Dr. Rigby.

4 A. Good morning.

5 Q. Dr. Rigby, let me start where Ms. Kimball  
6 started yesterday. You were asked some questions  
7 about acid rock drainage and showed some pictures of  
8 some yellow water and there was discussion of acid  
9 rock drainage from there and the rock piles.

10 Do you recall those questions?

11 A. I do.

12 Q. What happens to all of the water that  
13 comes off the rock piles or in either of those  
14 pools?

15 A. It is basically collected, treated and  
16 discharged.

17 Q. Now, is the mine the only place in the  
18 valley where acid rock drainage occurs?

19 A. No, no.

20 Q. Where else does it occur?

21 A. Multiple hydrothermal alteration scars,  
22 which as I mentioned yesterday, during rainfall  
23 events, snow melt, et cetera, et cetera, creates  
24 erosion flows, which basically flow down the steep  
25 sides of the valley across the R38 and into the Red

1 River. So regular occurrence and has been forever.

2 **Q. Have these been known to impact the road**  
3 **and the river?**

4 A. Absolutely.

5 **Q. How so?**

6 A. The deadly flows need to be cleared, so  
7 the R38 is closed while the authorities clear the  
8 debris, and it basically, because of the acid  
9 generating nature of the material, it clearly  
10 reduces the pH in the Red River and turns the Red  
11 River red, plus turbidity.

12 **Q. Now in the 1960s and 1970s when the**  
13 **waste-rock piles were being created, are you aware**  
14 **of the Government ever objecting to the waste-rock**  
15 **piles as being a source of potential acid rock**  
16 **drainage?**

17 A. No.

18 **Q. What is your understanding of what the**  
19 **Forest Service issue was of the waste-rock piles?**

20 A. I believe they viewed the waste-rock piles  
21 favorably or positively because they reduced -- they  
22 basically sealed existing hydrothermal scars in that  
23 location and inhibited ARD from that material.

24 MR. TODD: Could we turn, Patty, please to  
25 Chevron Exhibit 281, Page 5.

1           Let's go to the next page, please.

2           And highlight the third paragraph down  
3 under Section 3, starting, "There are several."

4           **Q.       (By Mr. Todd) Dr. Rigby, this is the**  
5 **Forest Service's environmental assessment and**  
6 **justification of a land exchange, so justifying**  
7 **giving land to Molycorp for waste rock disposal?**

8           A.       Yes.

9           **Q.       How did the Forest Service deal or view**  
10 **the waste-rock piles here?**

11          A.       As I said, positively, but it reduced this  
12 impact.

13          **Q.       Let's move on. You were asked lots of**  
14 **questions about Molycorp's exploration program at**  
15 **Questa in 1954 to 1956, so prior to the DMEA loan.**

16                   Do you recall that?

17          A.       I do.

18          **Q.       Now the Government has asserted that**  
19 **Molycorp in those years was using diamond drilling**  
20 **to search for a low grade ore body. I take it the**  
21 **answers on cross yesterday that you disagree with**  
22 **both of propositions?**

23          A.       Correct.

24          **Q.       Let's start with drilling. The Government**  
25 **on cross with both witnesses yesterday extolled**

1     **Mr. John Schilling as an expert regarding the Questa**  
2     **Mine in the 1950s.**

3                     **Do you recall that?**

4             A.     I do.

5             **Q.     Do you agree with that assessment of**  
6     **Mr. Schilling's expertise?**

7             A.     A very, very capable exploration  
8     geologist, yes.

9             **Q.     And very familiar with the mine?**

10            A.     Indeed.

11                   MR. TODD:  Let's pull up CX043, the 1956  
12     Schilling report, please.  Let's please turn to  
13     Page 8 to 9 of the report, which is starting at  
14     Page 22 of 104.

15            **Q.     (By Mr. Todd)  Dr. Rigby, how does**  
16     **Mr. Schilling -- what exploration methods does**  
17     **Mr. Schilling report as of 1956 that Molycorp was**  
18     **using or not using at the Questa Mine?**

19            A.     Basically underground exploration is  
20     carried on by drifting and raising among the veins,  
21     crosscutting where appropriate and, as he says,  
22     diamond drilling is not used.

23            **Q.     If diamond drilling had been used at**  
24     **Questa?**

25            A.     He would have known.

1           **Q.       He would have known?**

2           A.       Indeed.

3                   MR. TODD:   Let's pull up CX054.

4           **Q.       (By Mr. Todd)   And this, Dr. Rigby, to**  
5           **move us along, is the DMEA field team's Final Joint**  
6           **Geological and Mine Drilling report.**

7           A.       Yes.

8           **Q.       What was the purpose of this document?**

9           A.       It was basically a first opinion on, or an  
10          assessment of what Molycorp was proposing in support  
11          of their application for a DMEA funding.

12          **Q.       And it is dated April 2, 1957.**

13                   **Do you see that?**

14          A.       Yes.

15          **Q.       This is another contemporaneous account of**  
16          **what was at the mine?**

17          A.       Indeed.

18          **Q.       Would the field team have inspected the**  
19          **mine in person?**

20          A.       Yes.

21          **Q.       As well as reviewing documentation?**

22          A.       Correct.

23          **Q.       How comprehensive of a review in your**  
24          **understanding would the field team had taken?**

25          A.       I think, as I alluded to yesterday, really

1 to me it was the expertise experience and capability  
2 of the geologists and engineers within the DMEA, the  
3 USGS and the Bureau of Mines that had tremendous, I  
4 think, impact on this program because they took  
5 their jobs very, very seriously and they did, to me,  
6 a very detailed assessment of, A, what was being  
7 proposed in the context of the geological  
8 environment and the geological understanding which  
9 existed at the time for the Questa Mine.

10 MR. TODD: Let's turn to Page 6, which is  
11 16 of 54.

12 Q. (By Mr. Todd) Dr. Rigby, what exploration  
13 methods did the DMEA field team in 1957 report were  
14 used or not used at the Questa Mine?

15 A. Well, basically drifts and crosscuts. As  
16 you can see, no diamond drilling has been done. And  
17 basically assay records have not been kept or are  
18 not available. And this is fundamental information  
19 that you must have at a mine or certainly for  
20 geological evaluation.

21 Q. You stressed the importance of sampling  
22 and assaying yesterday in response to a question  
23 from Ms. Kimball. What sorts of sampling was  
24 Molycorp using pre-DMEA?

25 A. Because it was looking for high grade

1 veins, high grade veins are clearly visible once you  
2 intersect them, and therefore they didn't really  
3 need, you know, comprehensive sampling. But, and I  
4 think what I was aware of was that apparently they  
5 occasionally take grab samples from all cuts as they  
6 are coming out of the mine.

7 Well, the problem of that is where exactly  
8 did that sample come from? That sample is very good  
9 for that sample in terms of the limited content, but  
10 you don't know in three-dimensional space where it  
11 actually came from, so it is not particularly  
12 helpful.

13 **Q. You mentioned in your testimony some other**  
14 **types of samples, knot samples and channel samples?**

15 A. Knot samples, channel samples and indeed  
16 in diamond drilling you actually get a core, you  
17 composite sections of that core, assay that core, so  
18 you get a specific location and grade of that  
19 sample, which is critical especially when you are  
20 looking for low grade deposits.

21 **Q. Now the Government yesterday showed**  
22 **USX003, which was an SEC filing from 1964, which**  
23 **stated that there was diamond drilling and searching**  
24 **for low grade ore as of 1954.**

25 **Based on the materials you have just seen**

1     that is not correct. If Molycorp was not using  
2     exploratory drilling or representative sampling  
3     prior to 1956, is it possible at all in your  
4     experience and your expertise that that they were  
5     searching for a low grade ore body?

6           A.     I don't believe so, no.

7           Q.     What sort of ore was Molycorp exploring  
8     for prior to the DMEA program?

9           A.     What they always explored for, which was  
10    high grade vein system that would support their  
11    operations as they had done since 1921.

12                  MR. TODD: Let's pull up Mr. Schilling's  
13    report again, CX43.

14           Q.     (By Mr. Todd) The Government asserts that  
15    Molycorp's DMEA application was driven in part by  
16    Mr. Schilling's discussion of low grade ore at  
17    Questa.

18                  Do you agree with that?

19           A.     Well, if it was I would have thought that  
20    they would have appended Mr. Schilling's geological  
21    assessment to their application, but they didn't.

22           Q.     And during Mr. Dewey's testimony we heard  
23    that Mr. Schilling did identify low grade  
24    mineralization at Questa but concluded that what was  
25    known at that point wasn't commercially viable.



1                   **Do you recall that?**

2           A.       That's right, they were not large enough.

3                   MR. TODD: Let's turn to Page 92, please,  
4 of this report.

5           **Q.       (By Mr. Todd) Looking at the top of the**  
6 **paragraph here, the highlighted text, what did**  
7 **Mr. Schilling say had to happen first before one**  
8 **could know whether there was commercially viable low**  
9 **grade ore at Questa?**

10          A.       It would need a detail study of grade and  
11 tonnage to establish economic value like any mine.

12          **Q.       And what would such a study entail?**

13          A.       A large amount of drilling, bulk sampling,  
14 as a precursor to scoping study, a pre-feasibility  
15 study and a final feasibility study. A lot of hard  
16 work to basically underwrite an investment and  
17 development decision once you have demonstrated  
18 economic value. Serious business it is.

19          **Q.       Are you aware of any evidence suggesting**  
20 **that any of that work had been done prior to the**  
21 **DMEA's involvement?**

22          A.       Not at all.

23          **Q.       Who first suggested such a program?**

24          A.       The DMEA.

25          **Q.       Did Molycorp rely on Dr. Schilling's**

1     **findings at all when it submitted its DMEA proposal?**

2           A.     I wasn't there, so I can't say, but there  
3     is certainly nothing in the record to suggest that.

4           **Q.     Whose reports did Molycorp rely on and**  
5     **attach to its application?**

6           A.     Two reports from Carpenter dated '54 and  
7     '56.

8           **Q.     Now Mr. Carpenter's '56 report, at least,**  
9     **does mention low grade mineralization at Questa.**  
10    **Did he anywhere recommend a program to go delineate**  
11    **it and explore for it?**

12          A.     Certainly not in that report.

13          **Q.     What did he recommend?**

14          A.     Continuing more of the same, looking for  
15    the contact where they believe they may find high  
16    grade vein systems.

17          **Q.     When you say the contact, can you**  
18    **describe?**

19          A.     It just says basically the contact between  
20    the volcanics and the country rock. You climb up  
21    the volcanics where you end up with sheers and  
22    fractures and so on, which hopefully hold some  
23    mineralization.

24          **Q.     The Government also noted that**  
25    **Mr. Carpenter in '56 noted diamond drilling. Did he**

1     **recommend that diamond core drilling be used to**  
2     **search for low grade ore?**

3           A.     I don't believe so. That reference, which  
4     I checked, I believe it is a quicker way of reaching  
5     the contact and that was the purpose of that diamond  
6     drilling reference.

7           Q.     Okay. So to sum up, in December of 1956  
8     when Molycorp applied for a loan, as the Government  
9     demonstrated yesterday, Molycorp knew of low grade  
10    mineralization at Questa, knew about diamond  
11    drilling and knew that a study of grade and tonnage  
12    using drilling and sampling could show if the ore's  
13    commercial. Knowing all of that, what did Molycorp  
14    propose to do to the DMEA?

15          A.     More crosscutting and drifting which could  
16    only be directed at exploring for more high grade  
17    vein systems.

18          Q.     Any drilling?

19          A.     No.

20          Q.     Any sampling?

21          A.     No.

22          Q.     During the negotiations over the contract,  
23    as you testified a minute ago, it was the DMEA that  
24    suggested using drilling and sampling and engaging  
25    in the studies to look for low grade ore; is that

1     **right?**

2           A.     Yes.

3           **Q.     How would you characterize Molycorp's**  
4     **reaction to the Government's proposal that it do**  
5     **these things?**

6           A.     If I can use my own words, I think they  
7     were very negative. I mean, look, you are applying  
8     to the DMEA for a loan to support exploration. You  
9     don't want to get acrimonious, but they clearly  
10    resisted the suggestion for diamond drilling,  
11    systematic sampling and so on, and so forth.

12                   That was one of the internal memos or  
13    letters from the DMEA stated, you know, a lot of  
14    what they were proposing was just not supportable.  
15    It wasn't supported by geological knowledge or even  
16    geological hypothesis. And as one of the references  
17    was, it is more like prospecting than exploring and  
18    certainly the DMEA wasn't set up to fund  
19    prospecting.

20           **Q.     Let me change gears now. You were asked a**  
21     **lot of questions about the importance of the DMEA or**  
22     **whether the DMEA was important to the development of**  
23     **the Questa mine.**

24                   **Do you recall those?**

25           A.     I do.

1           Q.     In your expert opinion, Dr. Rigby, could  
2     Molycorp have discovered and delineated and  
3     exploited the low grade ore body without the DMEA's  
4     technical and financial involvement?

5           A.     I think I said in my report, highly  
6     unlikely.

7           Q.     Let's talk about the execution of the  
8     program. We have already talked about the contract  
9     negotiation.

10                  How valuable, in your opinion, was the  
11     DMEA's technical assistance during the execution of  
12     the program?

13           A.     Very valuable. I mean, you know, they  
14     would -- again in my report I think I used the term  
15     hands-on. They were very much hands-on. This is an  
16     important exploration program which had to be  
17     executed as designed or as developed, but it needed  
18     close oversight because the thing about an  
19     exploration program is you don't do it with blinkers  
20     on.

21                  In other words, you embark on an  
22     exploration program and you are learning from every  
23     day. You are learning from every drill hole and you  
24     think, oh, we don't know that. That now changes our  
25     thinking. So we modify maybe the next drill hole to

1 maximize the benefit.

2           These are expensive drill holes, so you  
3 are eking out every little bit of geological  
4 knowledge to increase your understanding, and  
5 modifying the program as you go. That is why it was  
6 important for the oversight of highly experienced  
7 people.

8           **Q. Did the DMEA provide any assistance or**  
9 **guidance with respect to assaying?**

10          A. Yes, they did. I mean, that was agreed in  
11 the report and specification for assaying composite  
12 samples of core channel sampling along the drifts  
13 and crosscuts. And the, I think two examples of  
14 requests. I think one which was denied and the  
15 other one which was approved.

16           One was a request to dispense with channel  
17 sampling and just have an occasional wall sample.  
18 The interpretation of the justification of the  
19 request was, it was bogus and therefore it was  
20 denied.

21           The other one that was approved was, you  
22 know, because of the broken nature of a lot of the  
23 ground, diamond drilling is difficult. And the  
24 problem in diamond drilling in poor ground is that  
25 core recovery is low. You know, and they had some

1 very, very low examples of core recovery.

2 The problem with low core recovery is did  
3 we lose mineralization or did we lose waste. We  
4 don't know. So the company requested that in  
5 background, they be allowed to take sludge samples  
6 which is basically the sludge that comes back out of  
7 the hole from the drilling. It is not as good but  
8 it is certainly better than nothing. That was  
9 approved.

10 **Q. How about discovering errors in assaying?**

11 A. Apparently that did happen. I don't think  
12 we ever got to the bottom of why, but partway  
13 through the program, I think it was probably late  
14 '58, maybe '59, it was discovered that for whatever  
15 reason assay results have been overstated by a  
16 factor of two and basically we had to be cut in half  
17 50 percent of the reported value. That was a bit of  
18 a blow.

19 **Q. Who discovered that error?**

20 A. I am not sure who actually discovered it.  
21 I am not sure if it was DMEA. The fact is, it  
22 doesn't matter, it happened.

23 **Q. The Government noted that Molycorp dug**  
24 **more feet of tunnel on its own account than were dug**  
25 **using DMEA funding.**

1                   **Do you recall that?**

2           A.       I do.

3           **Q.       Have you reviewed a Molycorp tunnel on its**  
4 **own?**

5           A.       I have.

6           **Q.       And where and what is your assessment of**  
7 **that?**

8           A.       I think there are two dimensions to what  
9 they did themselves. One really resulted in  
10 nothing, which was probably, I am guessing  
11 4,000 feet or I think they did, in total, in  
12 addition to what was done in the contract about  
13 5,900 feet.

14                   A lot of that was, I believe, to the  
15 south, so the southwest and to the west looking for  
16 high grade veins on their own, and I believe they  
17 were unsuccessful.

18                   But also some of that was, number one,  
19 crosscut north, which was ultimately, let's say, and  
20 certainly drifts off that crosscut part of the DMEA  
21 program. I think that was -- that was good, let's  
22 say good development to access an area which would  
23 subsequently be proven to be from an exploration  
24 perspective highly successful.

25           **Q.       The discovery at the end that you**



1     **mentioned there, was that Molycorp work or jointly**  
2     **funded work?**

3           A.     Jointly funded work.

4           MR. TODD: Let's pull up CX107, which is  
5     Molycorp's final report on the DMEA program. We saw  
6     this yesterday. And let's turn to Page 4, which is  
7     6 of 9 in the exhibit.

8           Q.     **(By Mr. Todd) At the bottom of the page**  
9     **here, Dr. Rigby, it provides a summary of all of the**  
10    **drifting, crosscutting and drilling that was done**  
11    **during the program.**

12                   Do you see that?

13          A.     I do.

14          Q.     **Did Molycorp do any drilling on its own**  
15    **account?**

16          A.     I don't believe so.

17          Q.     **So if we include exploration by drilling,**  
18    **who covered more square feet, Molycorp on its own or**  
19    **the DMEA funded work?**

20          A.     Yeah, the DMEA funded work, clearly.

21          Q.     **There was 21,417 feet of drilling?**

22          A.     Yes.

23          Q.     **Thank you.**

24                   Let's move on to finances. Ms. Kimball  
25    **asked a lot of questions about bank borrowing and**

1     **capital raising yesterday.**

2                   **Do you recall those questions?**

3           A.     I do.

4           **Q.     In your expert opinion, sir, would**  
5     **Molycorp have been able to raise funds to explore**  
6     **and develop the low grade ore body at Questa without**  
7     **the DMEA's finance or involvement?**

8           A.     I don't believe so because providers of  
9     finance have to have a reason, have to have -- when  
10    you are applying for finance associated with mining,  
11    you have to have a good argument. There has to be  
12    an expectation of success, there has to be evidence.  
13    The investors and banks and so on are no fools.  
14    They have their own people with expertise in the  
15    sector, and, you know, they will do thorough  
16    assessment in their due diligence before providing  
17    funding.

18                   So you have to get your ducks in a row  
19    before you approach financiers.

20           **Q.     Ms. Kimball noted that in '54 and '55,**  
21     **Molycorp was able to raise about \$3 million.**

22                   **Do you recall that?**

23           A.     I believe so.

24           **Q.     Would Molycorp's financial position in**  
25     **1955 be relevant to whether it could explore for ore**

1     **in 1957 at Questa?**

2           A.     I think I mentioned that yesterday as  
3     well, using, I think it was the prospectus for the  
4     raising in '57 or there was a summary of basically  
5     balance sheets for the previous five or six years.  
6     The numbers range, basically what was available in  
7     income plus or less special factors ranged from  
8     about 500,000 to a million.

9           But that is not just Questa, that is  
10    Molycorp Corporation with all of their other assets  
11    as well. So there wasn't a lot left to support  
12    excavation at Questa and certainly not for searching  
13    for large low grade orbity.

14          **Q.     And despite having raised the fund that**  
15    **the Government pointed to, by the time of the DMEA**  
16    **application in December of '56, did Molycorp have an**  
17    **exploration planned at Questa?**

18          A.     It states in the application that no  
19    further exploration plans were available. They had  
20    no plans for further exploration.

21          **Q.     What impact did the signing of the DMEA**  
22    **contract have on Molycorp's ability to raise funding**  
23    **specifically for exploration of Questa in '57?**

24          A.     As I said earlier, from an investor  
25    perspective, you know, any good news can often be

1 leveraged and that's exactly what Molycorp did. In  
2 1957, soon after their contract was signed, Molycorp  
3 basically went to the market and raised funds and  
4 attached the signed contract to that application.

5 **Q. And what impacts did the Government's**  
6 **certification of a discovery at Questa in 1961 have**  
7 **on Molycorp's ability to raise funds to explore and**  
8 **delineate the ore body at Questa?**

9 A. Exactly the same, because now you have an  
10 even stronger story to tell to the market, not just  
11 that you have an exploration in place with the DMEA,  
12 but now in '60 the certification, that that resulted  
13 in a discovery of a large low grade ore body, which  
14 would be in the whole objective of the exploration  
15 program in the first place. And Molycorp quite  
16 rightly got into that for the market in further  
17 raising.

18 **Q. Last question on finances. The Government**  
19 **has pointed out repeatedly, and correctly, that**  
20 **Molycorp spent a lot more on its own account over**  
21 **the years, so '57 to '64, a lot more than the DMEA**  
22 **contributed to the exploration program. You agree**  
23 **with that, right?**

24 A. You mean post-'60?

25 **Q. I am including the money that Molycorp**

1     **spent on its own '57 to '60.**

2           A.     Yeah.

3           **Q.     And then from '60 to '64 many millions**  
4     **more, right?**

5           A.     Yes.

6           **Q.     Okay. Given that, and that's correct, but**  
7     **given that, Dr. Rigby, what is your view of the role**  
8     **of the DMEA's contribution to that initial**  
9     **exploration program? How do you characterize those**  
10    **funds?**

11          A.     I would definitely characterize it as seed  
12    capital or seed funding, which achieved its  
13    objective. It identified the ore body and that is  
14    the discovery holes which are so critical to any,  
15    you know, any new deposit, any new project. That  
16    really is the most important time in the life, but  
17    that's when the real work starts.

18                 And as I have mentioned earlier, you have  
19    got a huge amount of work to do to raise the  
20    knowledge base and the certainty to have pretty  
21    definitive cash flow projections to support a  
22    development decision and investment commitment.

23          **Q.     Shifting gears again, Dr. Rigby, you were**  
24    **asked a lot of questions yesterday about the**  
25    **relationship between the DMEA exploration area**

1       underground and the open pit mine on the surface.

2                   Do you recall that?

3           A.       I do.

4           Q.       And the suggestion was that these were  
5       different, separate, unconnected.

6                   Do you recall that?

7           A.       I do.

8                   MR. TODD: I will take a little time with  
9       this, Your Honor. I think it is important to walk  
10       through this carefully and geologically. I will do  
11       this as quickly as I can.

12                   THE COURT: Slow down just a little.

13                   MR. TODD: Yes, Your Honor.

14           Q       (By Mr. Todd) Dr. Rigby, let me start with  
15       this. The three different mining operations at  
16       Questa, two underground mines, one open pit, did  
17       they develop different ore bodies?

18           A.       Well, I don't believe so. It's basically  
19       one contiguous continuous, but contiguous is a  
20       geological term, large horseshoe-shaped ore body.

21           Q.       There are lots of references in the  
22       documents to the northeast zone and the southwest  
23       zone. What does that mean? What are those?

24           A.       Those are two zones within that large  
25       horseshoe-shaped mineral, area of mineralization

1     which had elevated molybdenum grades, hence the  
2     northeast and the southwest.

3           **Q.     Did DMEA's funded exploration occur in**  
4     **both?**

5           A.     To a degree, yes.

6           **Q.     And what exploration occurred in the**  
7     **northeast zone?**

8           A.     They, I think the emphasis shifted and  
9     certainly towards the latter part of the contract,  
10    the emphasis certainly focused on the northeast zone  
11    as a result of, you know, of intersecting  
12    mineralization.

13          **Q.     We saw a minute ago yesterday that**  
14    **Molycorp's final report to the DMEA.**

15               MR. TODD:   Could we pull up CX107, again  
16    and let's go to Page 9 of 9 and let's highlight the  
17    three blocks, please.

18          **Q.     (By Mr. Todd)   Just to orient us,**  
19    **Dr. Rigby, this was mentioned yesterday.  What did**  
20    **Molycorp report discovering through the DMEA funded**  
21    **exploration?**

22          A.     From the results of the exploration  
23    analysis of the assays, the drill logs and so on,  
24    they delineated three ore blocks, three distinct ore  
25    blocks; Block 1, Block 2 and Block 3.

1                   Block 3 was certainly in the northeast  
2     zone.

3           **Q.     And have you seen these plotted on maps?**

4           A.     I have.

5                   MR. TODD:   Could we pull up CX211, please.

6           **Q.     (By Mr. Todd)   This is a mineral**  
7     **examiner's report from 1969 prepared by a gentleman**  
8     **named Harb Ashby; is that right?**

9           A.     It is.

10                  MR. TODD:   Could we turn to Page 20 of 23,  
11     please.

12           **Q.     (By Mr. Todd)   To move us along,**  
13     **Dr. Rigby, do these maps plot where the three ore**  
14     **blocks were?**

15           A.     Yes, you can see them sort of dotted three  
16     blocks.

17           **Q.     And so that's the pixillation?**

18           A.     The pixilation, that is the word I was  
19     looking for.

20           **Q.     And what, we see reference to Summit 4,**  
21     **Lonesome Limited, Summit 5?**

22           A.     Those are the claims.

23           **Q.     Mining claims?**

24           A.     Mining claims, yes.

25           **Q.     On the surface?**



1           A.       Patented claims on the surface.

2           **Q.       And do you generally agree with the**  
3       **location of these ore blocks?**

4           A.       I do. I believe that is Block 3, isn't  
5       it?

6           **Q.       That's correct, sir.**

7           A.       Yes.

8           **Q.       Did the DMEA similarly prepare a final**  
9       **report?**

10          A.       Yes.

11               MR. TODD: Let's pull up CX108.

12          **Q.       (By Mr. Todd) And is this the DMEA's**  
13       **final report?**

14          A.       It is.

15               MR. TODD: Could we go to Page 15 of 17,  
16       please. And let's highlight the final paragraph or  
17       blow it up, please.

18          **Q.       (By Mr. Todd) What did the DMEA report**  
19       **about the jointly-funded exploration discover?**

20          A.       Well, you want me to read that?

21          **Q.       You can paraphrase it.**

22          A.       It is a large block. They concurred or  
23       concluded that there was inferred reserves. Let's  
24       not go into detail on that terminology, but they  
25       believed about 2.5 billion tons of molybdenum

1 bearing rock containing better than .2 percent  
2 molybdenite or molybdenum disulfide. Within that  
3 huge mass, there were two blocks of commercial grade  
4 .5 percent and within those they estimated  
5 10 million tons each or thereabouts.

6 And again, Number 1 Crosscut North, which  
7 is particularly relevant to Block 3.

8 **Q. And what does commercial grade mean?**

9 A. Well, commercial grade indicates that you  
10 can mine it for a profit. It indicates, you know,  
11 all of the evaluation work is to follow, but people  
12 have a feel for what cutoff grade, which is the  
13 breakeven grade above which you make money, below  
14 which you lose money.

15 And hence they believed because of that  
16 grade and I think ultimately the cutoff grade for  
17 the open pit was about .15 percent, so if you are  
18 mining .5 percent you are making a profit.

19 **Q. Dr. Rigby, is it possible to relate these**  
20 **blocks and zones that we have seen in these reports**  
21 **to mining claims and the location of the open pit on**  
22 **the surface?**

23 A. Yes. By overlaying various plans.

24 **Q. I thought you would say that. I am going**  
25 **to give you the materials to do that.**

1           A.       Thank you.

2                   MR. TODD:   Could we pull up CX109, please.

3       Could we highlight the legends at the top and the  
4       bottom so Dr. Rigby can see them.

5           A.       That is better.

6           **Q.       (By Mr. Todd)   Could you tell the Court**  
7       **what this map from 1960 depicts?**

8           A.       Okay.   It is a plan of the second tunnel  
9       shelf level showing the exploration under the DMEA  
10       contract.   And I think the most important -- can you  
11       just raise the top a little bit or pull the whole  
12       thing down?   Well, the most important --

13          **Q.       Let me ask you this, Dr. Rigby.   In the**  
14       **top left do you see who prepared this map?**

15          A.       USGS.

16                   MR. TODD:   We can get rid of the top call  
17       out.

18          A.       The most important thing there from a --  
19       in terms of the exploration success is, number one,  
20       Crosscut North, right in the middle of that figure,  
21       and you can see it is going north.   I don't want to  
22       put my finger on it and draw on it because I will  
23       ruin the diagram.

24          **Q.       (By Mr. Todd)   I can clear it if you would**  
25       **like.**

1           A.       Okay. Number 1 Crosscut North. What  
2       happened with that and that was -- that was  
3       developed by Molycorp on its own, I understand. And  
4       probably the latter or the last 2 to 300 feet of  
5       that Number 1 Crosscut North, that is less than  
6       that, it is probably about there (indicating),  
7       started to intercept pretty good grade, I think .5  
8       on average.

9                    There were assays of .7 percent moly, that  
10       was, you know, very encouraging. And then within  
11       the DMEA contract and they agreed that -- the DMEA  
12       agreed that they would support as part of the  
13       program Number 4 Drift West, which is to the left  
14       shown in red and from a Number 3 Drift East, which  
15       is also shown in red. That is 4 Drift West, 3 Drift  
16       East.

17           **Q.       And what is the implication of the tunnels**  
18       **there in red on this map?**

19           A.       They were basically jointly funded, DMEA  
20       and Molycorp. And from Number 3 Drift East, drill  
21       holes, diamond drills holes upwards were drilled and  
22       from Number 4 Drift West, diamond drill holes  
23       downwards were drilled and both intersected good  
24       grade mineralization.

25                   MR. TODD: Let me call up CX110, please.

1           Q.       (By Mr. Todd) CX110, Dr. Rigby, is the  
2       same as CX19 except there are some handwritten  
3       notations.

4                   Do you see those?

5           A.       I do.

6           Q.       What is your understanding of what those  
7       depict?

8           A.       I think those are handwritten notations  
9       from Dr. Quivik, I believe, indicating the edges of  
10      blocks.

11          Q.       It says OME1 and OME2, and we will confirm  
12      this later, but they represent the locations of the  
13      two commercial ore blocks, okay?

14          A.       Yeah.

15          Q.       Is that your understanding?

16          A.       Yes.

17          Q.       And do you generally agree with the  
18      location of those?

19          A.       Without doing a detail analysis, they look  
20      reasonable.

21          Q.       One last document to show you for the  
22      overlay.

23                   MR. TODD: Could we pull up CX47, Page 13,  
24      I think, it is.

25          Q.       (By Mr. Todd) And, Dr. Rigby, this is a

1     **1958 map, and what does this combine?**

2           A.     This is basically Molycorp's patented  
3     claims at the time on surface.

4           **Q.     What do you see overlaid on it in the**  
5     **middle?**

6           A.     Is that the -- I don't see it yet. Are we  
7     overlaying the second?

8           **Q.     It is difficult to see, but if you look in**  
9     **the middle of this you will see the 1958 second**  
10    **level tunnel --**

11          A.     And can we see the ore blocks?

12          **Q.     In a minute.**

13          A.     Okay.

14          **Q.     I know that you have looked at this not on**  
15    **the screen. Is it your understanding that the**  
16    **tunnel system in the middle of the picture is the**  
17    **1958 second level --**

18          A.     Yeah, because you basically superimpose  
19    overlaying. So we have got the surface claim  
20    locations, you have got the underground development  
21    on the second tunnel, the second level tunnel shelf.

22               MR. TODD: Could we overlay CX47, CX110  
23    and CX211. Can we zoom in on the area with the  
24    pixillation and OME2.

25          **Q.     (By Mr. Todd) And, Dr. Rigby, what does**

1     **this show you about the Molycorp reported ore blocks**  
2     **and the DMEA reported ore zones?**

3           A.     Well, I think we see three things. One  
4     basically that successful exploration with the up  
5     and downholes in the northeast zone from the  
6     development and drilling.

7                     Then the delineation and certification of  
8     the ore blocks patented, the surface claims  
9     specifically Summit 4, Summit 5 and Lonesome are all  
10    pretty much coincident. It is the same, in the area  
11    and the beauty -- and then they discovered this from  
12    an analysis that Harb Ashby and mineral examination  
13    report where he, when he looks at -- when he visited  
14    the mine or the site and walked the surface,  
15    identified where the claims were and then gave a  
16    written description of activities that were  
17    occurring at the time, and that was in 1969.

18                    He refers to ore mining taking place on  
19    the -- in the eastern part of Lonesome.

20                    Stripping of overburden taking place for  
21    the rest of Lonesome and stripping of overburden  
22    taking place on Summit 4 and 5.

23                    So that is telling me that this area that  
24    you just circled was within the open pit.

25           **Q.     Now, Ms. Kimball, yesterday, made the**

1 point that the DMEA workings, the discovery that we  
2 just saw, was lower than the open pit?

3 A. Yes, which is why you used up-drill holes  
4 drilled vertically upward.

5 Q. And your response several times was but it  
6 is the same ore body?

7 A. The same ore body, absolutely.

8 Q. Yesterday you were very, very eager to  
9 draw something on the white board over there?

10 A. I was.

11 Q. And you weren't allowed to, yesterday?

12 A. No.

13 Q. Okay.

14 MR. TODD: Your Honor, after testimony  
15 yesterday, I didn't discuss Mr. Rigby's testimony  
16 with him, but to save time today I didn't want him  
17 drawing in court to move us along, so I invited him  
18 to come early this morning and to draw whatever he  
19 wanted. He has drawn something on that board, I  
20 haven't seen it, I haven't discussed it with him,  
21 but I would like to let him describe what he wanted  
22 to say yesterday if that is okay?

23 THE COURT: Any objection?

24 MR. KIMBALL: No.

25 THE COURT: No objection, you may.



1 MR. TODD: May I approach, Your Honor?

2 A. So this is basically a plan view of the  
3 northeast zone. This is -- we have already seen  
4 these and the two previous diagrams. So this is the  
5 Number 1 Crosscut North, that is Number 3 Drift  
6 East, and this is the Number 4 Drift West.

7 And these are the locations, approximate  
8 locations of the diamond drill holes. These were  
9 drilled up and these were drilled down (indicating).  
10 And I think the -- only one more?

11 The second diagram is a section looking  
12 north. If you imagine the Number 1 Crosscut is  
13 going in this direction due north and the last 2 to  
14 300 feet intersected reasonably high grade  
15 mineralization?

16 This is Number 3 Drift East, from which  
17 drill holes were drilled upwards intersecting the  
18 mineralization. This is, if you can imagine, this  
19 is Number 4 Drift West, but it is sort of drilled  
20 here, right? Downholes intersected the  
21 mineralization. So this was the mineralization in  
22 the northeast zone.

23 The geologists believe -- this is the  
24 existing topography, Sulphur Gulch, and this is the  
25 mountain. They believed originally the

1 mineralization went all the way but it was eroded  
2 over geological time.

3 And to me this demonstrates more than  
4 plans and so on, how awry the mineralization was  
5 first discovered then delineated with exploration  
6 program funded partly by the DMEA.

7 I think that puts it in simple terms and  
8 the open pit ultimately, I mean it is not perfect in  
9 terms of scaling and what have you, but the open pit  
10 was around here (indicating).

11 MR. TODD: Your Honor, could we mark these  
12 as Chevron Demonstrative 4 and 5?

13 THE COURT: Yes, please. Go ahead and  
14 mark them on the paper.

15 (Exhibit marked, Chevron Demonstrative 4  
16 and 5.)

17 **Q. (By Mr. Todd) Dr. Rigby, final question.**  
18 **Once this discovery was made underground as part of**  
19 **the DMEA program, what did Molycorp then do to get**  
20 **to the open pit?**

21 A. Oh, well, that was in 1960 when the river  
22 was certified and almost immediately they, they  
23 started work.

24 '61 they raised additional funds and those  
25 additional funds really was for further exploration

1 and definition drilling, infill drilling, and a huge  
2 amount of work which culminated in the finalization  
3 and publication of the feasibility study in 1964.

4 And that work, it was, it started with  
5 exploration to get high resolution of the grade  
6 distribution and better understanding of the edges  
7 and the variability of the mineralization, but then  
8 it shifted to some serious open pit design work and  
9 then a huge amount of metallurgical test work.  
10 Because, you know, they only had a 50-ton per day  
11 mill. We ended up with eight, in '65, an 8,000-ton  
12 per day operation.

13 And so they had to make sure that they had  
14 done sufficient test work metallurgical test work on  
15 both samples and pilot plant test work to ensure  
16 that they had the right process flow sheet which  
17 would optimize the recovery of the molybdenite  
18 concentrate.

19 **Q. And in your expert opinion would any of**  
20 **that have been done without the original DMEA**  
21 **discovery?**

22 **A. In my expert opinion, absolutely not.**

23 **Q. Last topic, Dr. Rigby, the Red River**  
24 **Valley fill concept. I am not going to ask you any**  
25 **questions about the design or hypotheticals. His**

1 Honor has moved us on from that. Let me just ask  
2 you this: The Government has suggested that  
3 Molycorp was not really serious about the valley  
4 fill concept, that it was just something that was  
5 just tossed out casually at one meeting and wasn't  
6 really a thing.

7 In your expert opinion, was this a serious  
8 proposal addressing a serious need for Molycorp?

9 A. Undoubtedly, yes, it was a critical need,  
10 not just serious, it was critical at that time.

11 Q. And what are your bases for believing  
12 that?

13 A. Well, information that I have read but  
14 also conversations that I have had with Dave  
15 Shoemaker, Gene Dewey and John Landgreth. And the  
16 document in 1972 which looks forward of the next,  
17 four, five, six years in terms of mine planning and  
18 clearly can be seen on one of the pages in that  
19 document, there is still talk about the bridge waste  
20 dump, and the south side waste-rock piles, which is  
21 on the south side of the river.

22 MR. TODD: Could we pull up CX, I am going  
23 to guess, 282. Could we go to Page 18.

24 Q. (By Mr. Todd) Are these the dumps you are  
25 referring to?

1           A.       Absolutely.

2                   MR. TODD:  If we could highlight the  
3 possible future dumps.

4           **Q.       (By Mr. Todd)  What is your understanding**  
5 **of Sector 1, Sector 2 and Sector 3?**

6           A.       Basically these are all north.  A, are  
7 basically north dumps, and B are pretty much south  
8 dumps.  And we can see three, well, four references  
9 Sector 1 south, south side Red River, 2, south,  
10 same.  Sector 3, the same, and then a bridge filled  
11 axis across Red River requires tunnel through.  That  
12 is how you get access to the south side for waste  
13 disposal.

14          **Q.       Is it understanding, Doctor, and have you**  
15 **formed an opinion that this is the same valley fill**  
16 **concept Molycorp proposed to the Forest Service in**  
17 **1969?**

18          A.       It can only be the same.

19                   MR. TODD:  No further questions,  
20 Your Honor.

21                   THE COURT:  You may step down.

22                   (Whereupon, the witness was excused.)

23                   THE COURT:  You may call your next  
24 witness.

25                   We have a mechanical issue and so we are

1 going to take about a five-minute break and see if  
2 we can get it resolved.

3 (A recess was taken.)

4 THE COURT: We can proceed.

5 MR. HOPSON: Chevron calls Dave Fredley.

6 THE COURT: Thank you.

7 (Whereupon, the witness was sworn.)

8 THE COURT: You may proceed.

9 THE COURT REPORTER: Would you please  
10 state and spell your last name for the record?

11 THE WITNESS: My name is David C. Fredley,  
12 F-R-E-D-L-E-Y.

13 MR. HOPSON: Mr. Fredley, did you submit  
14 written direct testimony in this case?

15 THE WITNESS: Yes, sir.

16 MR. HOPSON: Did you prepare that  
17 testimony?

18 THE WITNESS: Yes, sir.

19 MR. HOPSON: Is that testimony true and  
20 correct today, to the best of your knowledge?

21 THE WITNESS: Yes, sir.

22 MR. HOPSON: We tender his testimony,  
23 Your Honor.

24 THE COURT: Thank you. It will be  
25 admitted.

1 (Mr. David Fredley's direct testimony was  
2 prefiled and admitted.)

3 THE COURT: Counsel, you may proceed.

4 And tell me your name again.

5 MR. HARRISON: Good morning, Your Honor.

6 Bryan Harrison.

7 THE COURT: Okay. Thank you,

8 Mr. Harrison.

9 CROSS-EXAMINATION

10 BY MR. HARRISON:

11 **Q. Good morning, Mr. Fredley.**

12 **A. Good morning, Mr. Harrison.**

13 **Q. You worked for the Bureau of Land**  
14 **Management and then the Forest Service as part of**  
15 **your professional career; is that correct?**

16 **A. Yes.**

17 **Q. Forest Service is part of the Department**  
18 **of Agriculture?**

19 **A. That is correct.**

20 **Q. And BLM is part of the Department of**  
21 **Interior?**

22 **A. Yes.**

23 **Q. You would agree that both of these**  
24 **agencies work to serve the public interest, correct?**

25 **A. Would you repeat that?**

1           Q.     Both of these agencies work to serve the  
2     public interest?

3           A.     Absolutely.

4           Q.     And based on your experience with both,  
5     you would agree that Federal agencies must comply  
6     with laws and regulations?

7           A.     Yes, and they write regulations.

8           Q.     And they aren't to provide special  
9     treatment to any one individual or company?

10          A.     I wouldn't think so.

11          Q.     And oftentimes, agency decisions must  
12     balance a broad range of competing interests?

13          A.     For sure.

14          Q.     Chevron is a for-profit company, correct?

15          A.     I assume they are.

16          Q.     And Chevron's corporate predecessor,  
17     Molycorp, is a for-profit company, as well?

18          A.     I would assume so.

19          Q.     And their primary purpose is to make as  
20     much money as possible for shareholders, correct?

21          A.     I think that is one of the goals of  
22     companies.

23          Q.     The Forest Service does not share that  
24     same mission or goal, correct?

25          A.     To make money for a company?



1           **Q.       Correct.**

2           A.       No.

3           **Q.       Neither does BLM?**

4           A.       That is correct.

5           **Q.       You never worked for either BLM or the**  
6 **Forest Service in New Mexico?**

7           A.       No, I did not.

8           **Q.       And when you worked for both, none of your**  
9 **responsibilities involved the Questa Mine?**

10          A.       That is correct.

11          **Q.       And none of your responsibilities would**  
12 **either involve the Defense Minerals Exploration**  
13 **Administration or DMEA?**

14          A.       That is true.

15          **Q.       In your testimony, you were not providing**  
16 **legal interpretations of the mining laws, correct?**

17          A.       I am providing an expert on what I believe  
18 the mining law states.

19          **Q.       But you are not a lawyer, correct?**

20          A.       I am not a lawyer, for sure.

21          **Q.       And you've never published a treatise on**  
22 **mining laws?**

23          A.       No, I have not.

24          **Q.       Throughout your testimony, you repeat a**  
25 **phrase that, "United States was the paramount**

1     **proprietor of the Questa site."**

2                     **Do you recall that?**

3             A.     I do.

4             **Q.     And you took this term from a 1914**  
5     **treatise by Curtis Lindley?**

6             A.     That's correct.

7             **Q.     You would consider his treatise as a**  
8     **leading authority on mining or mining law?**

9             A.     Absolutely.

10            **Q.     And Mr. Lindley was a preeminent mining**  
11    **attorney?**

12            A.     That is correct.

13            **Q.     And considered authoritative on these**  
14    **issues?**

15            A.     Yes.

16            **Q.     Would you give his legal interpretations**  
17    **of the mining laws more weight than that of a**  
18    **layperson?**

19            A.     Obviously.

20                    MR. HARRISON:  If I could show CX  
21    Exhibit 10.

22            **Q     (By Mr. Harrison) These are excerpts from**  
23    **Mr. Lindley's treatise that you testified about on**  
24    **direct, correct?**

25            A.     Yes.

1 MR. HARRISON: If we could turn to  
2 Page 25.

3 Q (By Mr. Harrison) In talking about mining  
4 claims, in the middle of Page 25, Mr. Lindley said  
5 that, "A patent adds but little to a locator's  
6 security."

7 Do you see that?

8 A. Yes.

9 Q. And so as long as a claim is located or  
10 staked, patenting doesn't mean much to Mr. Lindley.

11 Would you agree with that?

12 A. No.

13 Q. Are mining claims property rights?

14 A. They are possessory rights.

15 MR. HARRISON: If we could turn to the  
16 next page.

17 Q (By Mr. Harrison) At the top of Page 26,  
18 the first sentence, Mr. Lindley writes, "The owner  
19 of such a location is entitled to the exclusive  
20 possession and enjoyment against everyone, including  
21 the United States itself."

22 Did I read that correctly?

23 A. You read that correctly.

24 Q. In your direct, you testified that the  
25 locator's rights are subordinate to the

1     **United States; is that correct?**

2           A.     Yes, I did.

3           **Q.     Is that still your testimony?**

4           A.     Absolutely.

5           **Q.     So you disagree with Mr. Lindley that a**  
6     **locator has exclusive possession, even against the**  
7     **United States?**

8           A.     Absolutely.

9           **Q.     But even if the United States is the**  
10    **nominal paramount owner or paramount proprietor, as**  
11    **you say.**

12                   **From a practical perspective, the**  
13    **United States did not act as the paramount**  
14    **proprietor at the Questa Mine site; is that correct?**

15           A.     No, that is not correct.

16                   A paramount proprietor is a paramount  
17    proprietor. They acted as the Government's  
18    representative at the site.

19           **Q.     They didn't control any of the mine's**  
20    **mineral activities, did they?**

21           A.     Of course, they did.

22           **Q.     They didn't dictate where and how the**  
23    **mining should occur?**

24           A.     They dictated how and where waste dumps  
25    should be disposed of.

1           **Q.       We will get to that in a little bit.**

2                   **The Government did not control timber**  
3   **activities on the land, did they?**

4           A.       When you say, "on the land," what are you  
5   referring to?

6           **Q.       On the Questa site.**

7           A.       The Questa site has both patented private  
8   land and unpatented Federal land, so you'll have to  
9   be more specific for me to answer that.

10          **Q.       So on the unpatented claims for both**  
11   **mining claims and mill sites, the United States did**  
12   **not -- was not in use of that property when**  
13   **Chevron -- after Chevron had located or staked**  
14   **claims on those, correct?**

15          A.       I don't think that's correct. They had  
16   whatever use they wanted to that property.

17          **Q.       The United States, in fact, did not use**  
18   **that property while Chevron had mill site and mining**  
19   **claims; is that correct?**

20          A.       I don't have any information that they did  
21   not use that.

22          **Q.       Well, in your deposition, you testified**  
23   **that the Federal Government could use these lands,**  
24   **the service of these lands, for recreations.**

25                   **Do you recall testifying to that?**

1           A.       I do.

2           **Q.       What recreations could have been used in**  
3           **the area around the open pit mine when Chevron held**  
4           **unpatented mill site and mining claims there?**

5           A.       It would have been difficult, but if a  
6           hunter wanted to go in there, he probably could  
7           have. If a hiker wanted to go in there, he probably  
8           could have. If a photographer wanted to go in  
9           there, he probably could have.

10          **Q.       Chevron had a security gate at the front**  
11          **of the facility, correct?**

12          A.       Oh, absolutely.

13          **Q.       They had fences, correct?**

14          A.       There were fences.

15                 Could you describe where you might be  
16          talking about with that?

17          **Q.       Throughout the property there were fences**  
18          **that restricted the ability of the general public to**  
19          **access the property.**

20          A.       There were some fences and some gates.

21                 But if my understanding is correct, and I  
22          have been on the site a couple of times, those  
23          fences and gates were on Molycorp private property.

24          **Q.       So if one of Chevron's competitors, say**  
25          **Climax, decided it wanted to access the property on**

1 the unpatented mining or mill site claims, would  
2 they have been able to go on to that property, given  
3 that your testimony is they are public lands?

4 A. Sure.

5 Q. As paramount proprietor, Mr. Lindley also  
6 explained that there are, quote, "equitable  
7 circumstances that bind the United States from  
8 interfering with Chevron's mining or possession."

9 Do you recall him writing about that?

10 A. I don't recall that specific statement.

11 Q. So if we could look below, on Page 26  
12 here, the second sentence, quote, "There are  
13 equitable circumstances binding upon the conscious  
14 of the governmental proprietor that must never be  
15 disregarded."

16 Do you see that?

17 A. I do.

18 Q. If the United States were to divest or  
19 withdraw Chevron's mining rights, according to  
20 Mr. Lindley, that would violate -- that would be  
21 improper?

22 A. Would you repeat that again, please?

23 Q. Sure, I will rephrase.

24 The next sentence will be helpful, as  
25 well.

1           "Rights have become vested that cannot be  
2   divested without the violation of all the principles  
3   of justice and reason."

4           So my question is, if the United States  
5   were to attempt to divest or withdraw Chevron's  
6   mining rights, that would be violative of, quote,  
7   "all the principles of justice and reason,"  
8   according to Mr. Lindley?

9       A.     I guess I would have to research that a  
10   little bit further than sitting right here on the  
11   stand and -- but the Government has -- has withdrawn  
12   from entry of lands that have mining claims all the  
13   time.

14           The Government has stopped patenting on  
15   the mining claims. So it does it constantly.

16       Q.     And, but practically speaking, the  
17   United States never withdrew or divested Chevron's  
18   mining rights here by withdrawing either of their  
19   mining claims?

20       A.     Not that I am aware of.

21       Q.     And they never restricted any of Chevron's  
22   mining claims, correct?

23       A.     They never restricted?

24       Q.     Yeah. Well, they never -- strike that.

25           MR. HARRISON: Let's look at another



1 authority on the role of the Federal Government with  
2 respect to mining claims.

3 If we could show CX006, please.

4 Q. (By Mr. Harrison) You testified in your  
5 direct about this 1908 letter to the editor written  
6 by Gifford Pinchot; is that correct?

7 A. Yes, sir.

8 Q (By Mr. Harrison) And Mr. Pinchot was the  
9 first director of the Forest Service?

10 A. He was the first chief, yes.

11 And he wasn't called a chief at that time,  
12 he was just called The Forester.

13 Q. Generally speaking, an individual doesn't  
14 or didn't need permission to stake or locate claims  
15 in the National Forest; is that correct?

16 A. They needed the lands to be open by the  
17 1872 mining log, and so the Federal Government gave  
18 them that authority, yes.

19 Q. But other than that, there is no  
20 permission that a locator needs to seek or obtain  
21 before they can stake a mining claim?

22 A. Well, that is the permission. The Federal  
23 Government gave them that permission.

24 Q. And the Forest Service can't interfere  
25 with someone's staking of claims; is that also

1     **correct?**

2           A.     They can. They can. You know, anytime  
3     Dick and Harry can go out there and put four stakes  
4     in the ground.

5                   MR. HARRISON: Let's turn to Page 3, the  
6     second full paragraph that starts with, "The fact  
7     that."

8           **Q     (By Mr. Harrison) In this paragraph,**  
9     **Mr. Pinchot says that the Federal Government will**  
10    **stay out of the way of mining activities in the**  
11    **National Forest; is that correct?**

12          A.     Well, I think you were paraphrasing in  
13    there, but I don't think that is exactly what he  
14    says.

15          **Q.     Mr. Pinchot says here that, at the bottom,**  
16    **"No rules and regulations of the Forest Service have**  
17    **ever interfered with the right to prospect, locate**  
18    **and develop mineral claims."**

19          A.     That is right. At that time there were no  
20    rules that did that.

21                   MR. HARRISON: If we could go to the top  
22    of Page 4.

23          **Q     (By Mr. Harrison) The first paragraph says,**  
24    **"Even if the Forest Service desired to prevent**  
25    **prospecting in the National Forest and emphatically**

1       **does not, it could not do so under the law."**

2                   **Do you see that?**

3           A.       Yes, I do.

4           **Q.       Do you agree with that assessment?**

5           A.       I do, at that time.

6           **Q.       You testified at your deposition --**

7           A.       And I -- and that's because the law at  
8       that time allowed prospecting and exploration under  
9       the 1872 mining on National Forest, unless they were  
10      withdrawn for other purposes.

11          **Q.       You testified at your deposition that,**  
12      **"The Forest Service did not violate the law or do**  
13      **anything improper," in your opinion, "with the**  
14      **management of the Federal lands regarding Chevron's**  
15      **mining and mill site claims."**

16                   **Do you recall testifying to that?**

17          A.       I do.

18          **Q.       Is that still your testimony?**

19          A.       It is.

20          **Q.       And since the early 20th Century, Chevron**  
21      **has treated the entire Questa Mine property as its**  
22      **own, both the property it owned and the property it**  
23      **held on patented mining and mill site claims on; is**  
24      **that correct?**

25          A.       No, I don't think that's correct.

1           Q.     Is it true that Chevron included  
2     unpatented mining and mill site claims and  
3     descriptions of its land holdings?

4           A.     Yes.

5           Q.     And is it true that Chevron also  
6     represented in patent applications that it held  
7     possession and control of the located or staked  
8     lands?

9           A.     That's correct. That is what a mining  
10    claim is. It is a possessory right against other  
11    junior claimants coming in and jumping the claim.

12           MR. HARRISON: If we could show USX32.

13           Q     (By Mr. Harrison) This is an August 1976  
14    land status map that was produced by Chevron.

15                   Have you seen this map before?

16           A.     You know, I have.

17           Q.     And is it an accurate map representing  
18    Chevron's landownership?

19           A.     That, I don't know if it is all accurate  
20    on landownership.

21           Q.     Do you have any reason to dispute that  
22    this was produced by Chevron or that it is a  
23    document in this case?

24           A.     I have no reason, one way or the other.

25           MR. HARRISON: Your Honor, I would move to

1 admit USX32.

2 MR. HOPSON: No objections, Your Honor.

3 THE COURT: Without objection, admitted.

4 (Exhibit admitted, USX32.)

5 Q (By Mr. Harrison) On this map it shows --  
6 this is after the land exchange is completed,  
7 correct?

8 A. That is correct. It shows 1976. The land  
9 exchange was completed in 1974.

10 Q. And it shows that Chevron has owned or  
11 staked virtually all of the land from Questa to Red  
12 River; is that correct?

13 A. I assume that is what this -- this map is  
14 showing, but I don't know it as a fact.

15 Q. And Chevron denotes the boundary of that  
16 area as, quote, "boundary of Molycorp land."

17 Do you see that?

18 A. I do see that notation.

19 Q. And also, it does show two separate ore  
20 bodies here, the northeast zone and the southwest  
21 zone?

22 A. It shows some high-grade areas of an ore  
23 body, yes.

24 Q. Would you agree that Chevron was able to  
25 freely acquire and use the land at and around the

1     **Questa site?**

2           A.     No, I wouldn't exactly agree with that.  
3     It wasn't exactly easy to acquire the lands in the  
4     exchange.

5           MR. HARRISON:   Let's look at CX282.

6                   We have seen this exhibit several times  
7     already, but it is the February 1972 Feasibility  
8     Study.

9                   If we could turn to Pages 38 and 39.

10          **Q     (By Mr. Harrison) This section of,**  
11     **"Landownership, Claims, Leases and Patents."**

12                   **Would you agree with the first sentence**  
13     **here that "Chevron's land acquisition efforts have**  
14     **been relatively unhampered"?**

15          A.     Well, if that is what it says, they --  
16     they'll probably have that understanding.

17          **Q.     And this is while the land exchange is**  
18     **going on; is that correct?**

19          A.     Over the past 50 years, yes.

20          **Q.     And in here, it notes that, "That is not**  
21     **to say that certain problems have not arisen in the**  
22     **purchasing of homesteads and other privately-owned**  
23     **land."**

24                   **Do you see that?**

25          A.     Yes.

1           Q.     And then it concludes, this paragraph,  
2     "Forest lands are open to mineral location and  
3     virtually all of the Red River trench has been  
4     staked with low mining claims under the mining law  
5     of 1872."

6                     Do you see that?

7           A.     I do.

8           Q.     So here it seems that the only issue  
9     Chevron has with acquiring land is with private  
10    landowners and homesteads, not with the Federal  
11    Government; is that correct?

12          A.     Apparently, that is true.

13          Q.     So around the same time the Chevron Group  
14    was concerned with changes to the mining laws and  
15    regulations, would you agree with that?

16          A.     I think the entire mining industry was  
17    concerned about changes in the mining law.

18          Q.     And fair to say, Chevron felt pressure to  
19    act fast in order to own and obtain additional lands  
20    at and around the Questa Mine site?

21          A.     I think it was one of the considerations,  
22    that they agreed to the exchange.

23                     MR. HARRISON: If we could look at the  
24    middle of Page 38, the paragraph that starts, "It is  
25    expected" -- sorry, the next paragraph.

1           Q        (By Mr. Harrison) Chevron writes in the  
2       memo notes, "The only thing certain is that the  
3       mining law of 1872 will be repealed. The only  
4       question is what will take its place. No matter  
5       what legislation is passed, it will not be as  
6       favorable to the mining industry as the present  
7       law."

8                   Do you see that?

9           A.       I do.

10          Q.       So fair to say, Chevron felt a need to  
11       acquire as much property as quickly as possible  
12       before changes to the mining laws would occur?

13          A.       I think that is fair to say, and it was a  
14       very pressured statement because that is exactly  
15       what happened in 1995 when Congress said there would  
16       be no more patenting mining claims.

17          Q.       And this section ends -- if we could look  
18       at Page 39, the last paragraph -- by saying that, "A  
19       concerted effort should be initiated in patenting  
20       mill site claims adjacent to the Questa main ore  
21       body and mill patent ore body areas."

22                   So Chevron here is noting that it needs to  
23       make a concerted effort at that time to acquire this  
24       property?

25          A.       Absolutely.



1           Q.       If we could just go back up to --

2           A.       I assume that is because they would --  
3 they would have more control over their own private  
4 land than if it were Federal land.

5           Q.       And to that point, Mr. Fredley, if we  
6 could go back to the paragraph that starts with,  
7 "Current proposals."

8                   Here Chevron expresses concern that, "The  
9 changes in the mining law would allow the Secretary  
10 of Interior to dictate the method of prospecting,  
11 when mining should start and stop, how the deposit  
12 is said to be mined, et cetera.

13                   "The investment risk still falls on  
14 industry but it will have little control over  
15 anything else."

16                   Do you see that?

17           A.       I do.

18           Q.       And that is consistent with the concern  
19 that you just testified about?

20           A.       Absolutely.

21           Q.       You testified, in your direct, that "The  
22 United States' ownership rights are similar to a  
23 private landowner's fee simple ownership rights."

24                   Is that correct?

25           A.       Yes.

1           Q.     And you also testified that, "The  
2     United States holds the same power over Federal land  
3     as an individual would over private land."

4           A.     More power.

5           Q.     The general public cannot enter someone's  
6     private property, locate claims and explore for  
7     minerals, correct?

8           A.     For sure.

9           Q.     But that was the case with the  
10    United States land until at least 1976?

11          A.     That's private individuals.

12          Q.     Strike that.

13                 Someone from the general public could  
14    enter land of the United States, locate claims and  
15    explore for minerals without providing any notice to  
16    the United States, correct?

17          A.     If the lands were open to mineral entry,  
18    that is correct.

19          Q.     A private fee simple landowner has the  
20    right to exclude people from their property,  
21    correct?

22          A.     That's correct, as does the Federal  
23    landowner.

24          Q.     But the United States can't pick and  
25    choose who stakes mining claims on its property, can

1     **they?**

2           A.     That is, that's correct, as long as the  
3     person is a citizen of the United States or a  
4     corporation, they can stake a mining claim on lands  
5     that are available under the 1872 mining law.

6           **Q.     And someone just can't start exploring or**  
7     **developing a mine on private property without the**  
8     **approval of the owner, correct?**

9           A.     Correct. And that is the same with the  
10    Federal owner.

11          **Q.     After 1976?**

12          A.     No, since the 1872 mining law, and the  
13    Federal owner is the one that passed the 1872 mining  
14    law that allowed that person or corporation to come  
15    onto the land.

16          **Q.     You would agree that the United States**  
17    **supports many individuals, companies and industries,**  
18    **correct?**

19          A.     Yes.

20          **Q.     And, in fact, that is the primary purpose**  
21    **of the Government itself?**

22          A.     I think the primary purpose of the  
23    Government is to support the citizens of the country  
24    and defend our shores, deliver our mail.

25          **Q.     So on some level, then, nothing is**

1 possible without the support or encouragement or  
2 involvement of the United States?

3 A. I guess that is somewhat a fair statement.

4 Q. So let's go through some of your direct  
5 testimony on areas that you claim the United States  
6 supported, encouraged or facilitated Chevron's  
7 mining developments.

8 Chevron's open pit mining operations  
9 required a tailings implement area, correct?

10 A. Yes, it did.

11 Q. And without that, it would not have  
12 existed? The mine could not have existed?

13 A. That's correct.

14 Q. So in 1964, Chevron purchased 440 acres  
15 from the State of New Mexico for the first tailings  
16 implement area?

17 A. That's correct.

18 Q. And the State of New Mexico knew that  
19 Chevron was going to use the land for a tailings  
20 area?

21 A. That is correct.

22 Q. And Chevron started construction on the  
23 tailings pond the next year, 1965?

24 A. I believe that's correct.

25 Q. Did the State of New Mexico support or

1 encourage Chevron's Questa Mine development by  
2 selling them the property for the eastern tailings  
3 implement area?

4 A. Apparently.

5 Q. Chevron also needed to obtain property  
6 right-of-ways from dozens of private landowners for  
7 the tailings implement area; is that correct?

8 A. I believe that is right.

9 Q. And did each of these landowners support  
10 and facilitate Chevron's mining operations?

11 A. I have no idea.

12 Q. Well, they provided right-of-ways for  
13 Chevron to be able to use the tailings implement  
14 area.

15 Would that be sufficient, under your  
16 opinion, to constitute support and encouragement?

17 A. A private individual -- private  
18 individuals did a right-of-way for tailings  
19 implements, is that what you are saying?

20 MR. HARRISON: If we could show USX476.

21 This is an admitted exhibit that was part  
22 of Mr. David Shoemaker's deposition and was an  
23 attachment to Chevron's January 2001 response letter  
24 to the EPA.

25 If we could turn to Page 8.

1           **Q       (By Mr. Harrison) This is a list of**  
2           **tailings dam previous owners.**

3                   **You have no reason to dispute the contents**  
4           **of this list?**

5                   THE COURT: Counsel, let me inquire.

6                   Are you attempting to do something in  
7           contrary to the stipulated order concerning  
8           evidentiary items that the tailings don't have  
9           anything to do with this case?

10                  MR. HARRISON: No, Your Honor, I am  
11           simply --

12                  THE COURT: What are you trying to do?

13                  MR. HARRISON: I am showing Mr. Fredley  
14           that -- I'm trying to elicit testimony that there  
15           were other individuals and entities who were  
16           involved in the development of the Questa Mine site.

17                  THE COURT: And your point is?

18                  MR. HARRISON: That his testimony is that  
19           it was the United States' involvement that  
20           encouraged and facilitated, but the point is there  
21           are others as well who did that.

22                  THE COURT: I think it is a given, but go  
23           ahead.

24           **Q       (By Mr. Harrison) So for the second**  
25           **tailings pond, Chevron purchased land from a BLM**

1     **public land sale option in 1966; is that correct?**

2           A.     That is correct.

3           **Q.     Chevron needed this land?**

4           A.     They did.

5           **Q.     And Chevron initiated the BLM process to**  
6     **request the public sale land auction?**

7           A.     Yes.

8           **Q.     Chevron was the highest bidder?**

9           A.     Yes.

10          **Q.     And it was reasonable for BLM to accept**  
11     **the highest bid of Chevron, correct?**

12          A.     Yes.

13          **Q.     Were any tailings disposal disposed of --**  
14     **strike that.**

15                 You are not aware of any tailings  
16     disposals on the area that was the subject of the  
17     public land sale prior to Chevron purchasing it at  
18     the public land sale auction; is that correct?

19          A.     That is correct.

20          **Q.     And prior to the land sale auction,**  
21     **Chevron had actually located mill sites on this**  
22     **area, correct?**

23          A.     That is correct.

24          **Q.     And so Chevron could have obtained**  
25     **ownership by applying for patents on these lands had**

1     **there been a current mining use, correct?**

2           A.     As long as they were presently being used  
3     and occupied for mining or milling purposes, they  
4     could have done that.

5           **Q.     Chevron preferred the land sale or the**  
6     **public land sale option instead because they thought**  
7     **it would be better public relations; is that**  
8     **correct?**

9           A.     That is correct.

10          **Q.     And it was Chevron's decision where to**  
11     **locate its tailings implement areas?**

12          A.     That is correct. There wasn't too many  
13     areas available and that is why they choose this  
14     spot.

15          **Q.     Chevron also located and patented, in your**  
16     **words, quote, "Some mill site claims near the**  
17     **western tailings area."**

18                   **Is that correct?**

19          A.     That is correct.

20          **Q.     These are called the Pinon Claims?**

21          A.     They are.

22                   MR. HARRISON: If we could show USX432.

23                   And so the Pinon Claims are the lightly  
24     shaded areas around the periphery of the implement  
25     area, correct?



1           A.       They are the stipulated areas to the north  
2       and southwest part, yes.

3           Q.       And a diversion ditch goes through these  
4       mill sites, correct?

5           A.       Apparently, yes.

6           Q.       And that is for diverting natural runoff,  
7       as you heard Mr. Dewey testify to yesterday?

8           A.       That is correct.

9           Q.       And the diversion ditch was not used for  
10       tailings waste disposal; is that correct?

11          A.       It was used to support the tailings  
12       disposal.

13          Q.       By preventing the natural runoff from  
14       going into the tailings area?

15          A.       That's correct.

16          Q.       I want to ask just two general questions  
17       about the tailings pipeline, with respect to  
18       ownership.

19                   It was Chevron's decision to develop the  
20       tailings pipeline; is that correct?

21          A.       Absolutely.

22          Q.       And Chevron needed to obtain permission  
23       for the tailings pipeline from several entities in  
24       addition to the Forest Service; is that correct?

25          A.       Molycorp did, yes, for sure.

1           **Q.     And any one of those could have withheld**  
2           **their consent or approval for the routing of the**  
3           **pipeline, correct?**

4           A.     They could have as private landowners,  
5           just as the Forest Service could and the Federal  
6           Government could.

7           **Q.     You testified that special use permits are**  
8           **completely discretionary, correct?**

9           A.     Yes, I did.

10          **Q.     But the Forest Service acted properly and**  
11          **followed its regulations when it issued the special**  
12          **use permit, correct?**

13          A.     I have no reason to think they violated  
14          any regulation or law by issuing the special use  
15          permit.

16          **Q.     And there is no reason for the Forest**  
17          **Service to terminate or cancel the special use**  
18          **permit, correct?**

19          A.     They didn't do it.

20          **Q.     And there would have been no reason why**  
21          **they could have?**

22          A.     I don't know of any reason.

23          **Q.     Another permit that you testified about**  
24          **was the decant water discharge permit issued by BLM.**

25                 **Do you recall that as your testimony?**

1           A.       I do.

2                   MR. HARRISON:  If we could show USX432,  
3   again.

4           Q        **(By Mr. Harrison) So the tailings disposal**  
5   **areas are the two dark areas in the middle of the**  
6   **map, correct?**

7           A.       That is right.

8           Q.       **And there are two sections of tailings,**  
9   **Section 35 and Section 36?**

10          A.       In general, that is a correct description.

11          Q.       **And the decant water discharge permit was**  
12   **only for Section 35 of the tailings area; is that**  
13   **correct?**

14          A.       As far as I know, that is correct.

15          Q.       **Chevron did not receive a permit for**  
16   **Section 36 because the water flowed over Chevron's**  
17   **own property and private right-a-ways?**

18          A.       You know, I am just not sure on that.

19          Q.       **Okay.**

20          A.       This diagram does not show the  
21   right-of-way, by the way, for the decant water.

22          Q.       **But --**

23          A.       It shows present decant but it doesn't  
24   show right-of-way.

25          Q.       **I will ask a general question and not**

1     pertaining to the map itself.

2                   For the decant water discharge permit in  
3     Section 35 over the BLM land, BLM required a  
4     stipulation in 1970 that the water must meet  
5     Federal, State and Local water quality standards,  
6     correct?

7           A.     That is my understanding.

8           Q.     And this was before the Clean Water Act  
9     was enacted, so that did not require Chevron at that  
10    time to obtain a national pollutant discharge  
11    elimination permit; is that correct?

12          A.     I don't know.

13          Q.     And we already talked about, but you heard  
14    Mr. Dewey testify about how the decant process  
15    would, in theory, send clean water into the Red  
16    River; is that correct?

17          A.     I think that is correct, yes.

18          Q.     And so there is no reason, in your  
19    opinion, for BLM to not allow Chevron to send clean  
20    water over Federal lands into the Red River,  
21    correct?

22          A.     Correct.

23          Q.     We will get to the land exchange in a  
24    little bit, but I just want to ask two questions  
25    there now.

1           **A land exchange would give Chevron fee**  
2   **ownership of that land?**

3           A.     That is correct. It is also my  
4   understanding that there could have been conditions  
5   placed on it, but in general, it is fee ownership.

6           **Q.     And you also agree, as you testified at**  
7   **your deposition, that there was no reason for the**  
8   **Government to disapprove or refuse the land**  
9   **exchange; is that correct?**

10          A.     No, they were the ones that suggested it.  
11   Why would they refuse it?

12          **Q.     Let's switch gears and talk about the**  
13   **pre-DMEA exploration and a few issues there. I know**  
14   **it's been discussed at length but there are a few**  
15   **questions I want to ask you about your direct**  
16   **testimony.**

17                **So once Chevron exhausted the high-grade**  
18   **ore in the first underground mine, you say that**  
19   **Chevron had no planned exploration and no reserves**  
20   **until the DMEA application; is that correct?**

21          A.     That is what Molycorp said, yes.

22          **Q.     And you heard the testimony of Mr. Dewey**  
23   **yesterday that Chevron knew of the existence of**  
24   **low-grade ore before applying for the DMEA loan,**  
25   **correct?**

1           A.       Yes.

2           Q.       You also heard Mr. Dewey testify that  
3       Chevron was very familiar with John Schilling and  
4       his 1956 report that noted a large low-grade  
5       molybdenum ore deposit, correct?

6           A.       Yes.

7           Q.       You also heard that Mr. Dewey said that  
8       the Chevron team's reluctance to undertake low-grade  
9       ore exploration because it, quote, had no use for  
10      it, end quote?

11          A.       Yes.

12          Q.       Do you take issue with any of that of  
13      Mr. Dewey's testimony?

14          A.       I don't.

15          Q.       You also heard Dr. Rigby testify that  
16      Chevron was well aware of diamond drilling methods  
17      at the time of the DMEA application; is that  
18      correct?

19                   MR. HOPSON:  Objection, Your Honor.  
20      Misstates prior testimony.

21                   THE COURT:  Sustained.

22          Q        (By Mr. Harrison) Are you aware of whether  
23      diamond drilling methods were prevalent at the time  
24      of the DMEA application in the late 1950s in the  
25      mining industry?

1           A.       Of course.

2                    Could you give me a second so I could get  
3 a drink of water?

4           **Q.       You also heard testimony about Dr.**  
5 **Carpenter and his involvement with Chevron at the**  
6 **site prior to the DMEA loan application; is that**  
7 **correct?**

8           A.       Yes.

9                   MR. HARRISON: If I could show CX186.

10          **Q       (By Mr. Harrison) This is a 1968 article**  
11 **from Robert Carpenter, titled "Geology and Ore**  
12 **Deposits of the Questa Molybdenum Mine Area."**

13                   **Have you seen this before?**

14          A.       You know, I have seen that.

15                   MR. HARRISON: Your Honor, I would like to  
16 move for admission of CX186.

17                   MR. HOPSON: No objection, Your Honor.

18                   THE COURT: Without objections, it will be  
19 admitted.

20                   (Exhibit admitted, CX186.)

21          **Q       (By Mr. Harrison) If we could turn to**  
22 **page three, paragraph which begins, "Because of."**

23                   **So you heard the testimony that Dr.**  
24 **Carpenter was intimately involved with the Questa**  
25 **Mine, correct?**

1           A.       Yes, I did.

2           Q.       Okay. In this paragraph, Dr. Carpenter  
3 writes, quote, "Underground headings were advanced  
4 into target areas and diamond" -- or, excuse me, let  
5 me begin with the first sentence of the paragraph.

6                   "Because of increasing difficulties of  
7 maintaining the small tonnage high-grade production,  
8 an intensive exploration program was initiated in  
9 1953."

10                   Do you see that?

11          A.       I do.

12          Q.       And then two sentences later, it says,  
13 "Underground headings were advanced into targeted  
14 areas and diamond drilling was initiated."

15                   Do you see that?

16          A.       I do.

17          Q.       And then the next sentence says, "By 1957  
18 it was apparent that the Questa Mine held promise of  
19 large reserves of low-grade molybdenum ore."

20                   Do you see that?

21          A.       I do.

22          Q.       You also heard testimony from Mr. Dewey  
23 and Dr. Rigby that prior to the May DMEA contract,  
24 Chevron was able to obtain millions of dollars in  
25 financing, correct?



1           A.       Yes.

2                   MR. HOPSON:  Objection.  Again, that  
3       question misstates the prior testimony.

4                   THE COURT:  Can you restate your question?

5           **Q       (By Mr. Harrison) Are you aware that in**  
6       **June, 1955, Chevron sold Kennecott \$2.8 million**  
7       **worth of stock?**

8           A.       I guess I am aware of it.  I've heard  
9       testimony of that but I am not a mine finance expert  
10      or stock expert.

11          **Q.       Are you aware that in June, 1954, Chevron**  
12       **obtained \$1.5 million in loans?**

13          A.       Apparently.

14          **Q.       And are you aware that Chevron had a**  
15       **\$4.2 million stock offering in 1957?**

16                   MR. HOPSON:  Objection, cumulative.

17                   THE COURT:  I will overrule that.

18          A.       Apparently.

19          **Q       (By Mr. Harrison) So in your opinion -- in**  
20       **your opinion in this case, you have testified that**  
21       **Chevron had given up on exploration until DMEA; is**  
22       **that correct?**

23          A.       Yes.

24                   MR. HARRISON:  If we could show USX520.

25          **Q       (By Mr. Harrison) This is Chevron's --**

1     **Molycorp's 1956 annual report, which predates the**  
2     **DMEA contract, correct?**

3           A.     Yes, it predates by a few months.

4           MR. HARRISON:  If we could go to  
5     page four, under "General."

6           Q     **(By Mr. Harrison) The first paragraph says,**  
7     **"Your company continues its policy of searching for**  
8     **new sources of minerals."**

9                   Do you see that?

10           THE COURT:  The first paragraph?

11           A.     Yes, I do.

12           Q     **(By Mr. Harrison) The first sentence of the**  
13     **next paragraph says, "Concentrated exploration is**  
14     **currently being done at Questa New Mexico."**

15           A.     Yes.

16           Q.     **And then about --**

17           THE COURT:  Why don't you ask him to read  
18     it himself and then you can ask him questions.

19           Q     **(By Mr. Harrison) Sure.  I just have one**  
20     **more question on this, but if you could read that**  
21     **paragraph and let me know when?**

22           A.     Read the entire?

23           Q.     **Just the paragraph "Concentrated**  
24     **exploration."**

25           THE COURT:  Just to yourself.

1           A.       Okay. I have read it.

2           **Q       (By Mr. Harrison) In the middle of the**  
3 **paragraph, it says that "Surrounding land had been**  
4 **staked on behalf of your corporation in order to"**  
5 **and then it cuts off "extensions of indicated**  
6 **mineralized area."**

7                   **Do you see that?**

8           A.       I do.

9           **Q.       So if, in your opinion, Chevron had given**  
10 **up on exploration efforts, why would they be staking**  
11 **claims prior to the DMEA contract?**

12          A.       Well, there are lots of areas outside the  
13 current underground mine. So I assume that they  
14 were looking at other areas.

15                 Also, I think what this might be talking  
16 about is, this was right in the middle of or towards  
17 the end of their negotiations with the DMEA people  
18 about initiating a contract.

19                 And so when they say "core drilling will  
20 shortly begin," I suspect that that is the core  
21 drilling that is defined by the contract that is  
22 just a couple of months from the future.

23          **Q.       You have heard testimony about DMEA, that**  
24 **it is a voluntary program, correct?**

25          A.       Yes, it is.

1           Q.       And DMEA requires that the plan must show  
2       a geological probability of making a significant  
3       discovery?

4           A.       Yes.

5           Q.       And you heard Dr. Rigby testify earlier  
6       today that the purpose of DMEA is not for  
7       prospecting?

8           A.       That is correct.

9           Q.       You testified that DMEA approval of  
10      Chevron's application was entirely discretionary,  
11      correct?

12          A.       That's correct.

13          Q.       But, again it was Chevron who decided to  
14      submit the application?

15          A.       Yes, they did.

16          Q.       And they entered into the contract in May,  
17      1957?

18          A.       That is correct.

19          Q.       Chevron was not required to agree to the  
20      terms of the contract?

21          A.       Molycorp was not required to agree to the  
22      terms of the contract, if they wanted the contract.

23          Q.       And DMEA repayment obligations are created  
24      only if Chevron were to develop a producing mine,  
25      correct?

1           A.       And a discovery had been determined.

2           **Q.       Repayment obligations are not contingent**  
3 **on just a recovery?**

4           A.       Would you state that again?

5           **Q.       Sure.**

6                   **The repayment obligations under DMEA**  
7 **require both a certificate of discovery and**  
8 **development by the participant, correct?**

9           A.       As a result of that discovery, that is  
10 correct.

11           **Q.       You testified, in your direct, that**  
12 **repayment was required, quote, "if a discovery was**  
13 **made from the exploration work, the federal**  
14 **government was entitled to interest-free royalties**  
15 **in return for the initial loans."**

16                   **Do you recall that?**

17           A.       I do.

18           **Q.       Is that still your testimony?**

19           A.       Yes.

20           **Q.       But in addition to that, the repayment**  
21 **obligations are -- require a producing mine,**  
22 **correct?**

23           A.       Well, that is kind of the only way that  
24 you produce minerals and make money is from a  
25 producing mine and that is what happened.

1           Q.       Chevron or DMEA contract ended in June,  
2       1960, correct?

3           A.       Yes.

4           Q.       And Chevron's final report noted that  
5       there were high -- there was a several high-grade  
6       ore bodies in the area or low-grade low bodies in  
7       the area, generally speaking?

8           A.       I think that is correct. That is what  
9       Molycorp stated in their final report.

10          Q.       And Molycorp also did additional  
11       exploration on its own during that same time period,  
12       correct?

13          A.       That is correct.

14          Q.       DMEA also issued its own final report in  
15       1960, correct?

16          A.       Yes, they did.

17          Q.       And it is also noted the presence of a  
18       large low-grade ore body, correct?

19          A.       Absolutely. A tremendous deposit of  
20       low-grade ore.

21          Q.       And DMEA's final report also said that it  
22       would take considerable time and capacity for  
23       explore this low-grade ore body, correct?

24          A.       For sure.

25          Q.       Is it fair to say that Chevron did

1     **substantially more exploration after the DMEA**  
2     **contract than prior to it, with respect to**  
3     **developing the --**

4             MR. HOPSON: Objection, cumulative.

5             THE COURT: Overruled.

6             A.     Would you repeat that, please?

7             **Q     (By Mr. Harrison) Sure.**

8                     **Did Chevron do more exploration for the --**  
9     **to develop the open pit mine after the DMEA contract**  
10    **ended?**

11            A.     They did a lot more drilling and  
12    delineation of the ore deposit. There is no  
13    question about that.

14                    But I think Dr. Rigby addressed that  
15    pretty clearly this morning, and I have absolutely  
16    no reason to doubt anything he said about that.

17            **Q.     Chevron didn't formally decide to develop**  
18    **an open pit until 1964, correct?**

19            A.     I don't know when they formally decided to  
20    do it or not.

21            **Q.     In October, 1964, Chevron estimated the**  
22    **post of developing the open pit mine and facilities,**  
23    **would be \$27.5 million.**

24                    **Are you aware of that?**

25            A.     I guess so.

1           Q.       And Chevron borrowed 20 million?

2                   THE COURT: If you know.

3           Q        (By Mr. Harrison) If you know.

4           A.       I assume they did but I don't know for  
5   sure.

6           Q.       And just two years later, in 1966, are you  
7   aware that Chevron estimated that the total cost for  
8   development, exploration and construction were  
9   upwards of \$44 million?

10          A.       That sounds right.

11          Q.       And that was at the time when the mine was  
12   just beginning its operations?

13          A.       Correct.

14          Q.       So part of its decision to develop and  
15   mine using the open pit method, Chevron designed its  
16   open pit mining facilities, correct?

17          A.       Absolutely.

18          Q.       And it built or modified facilities to  
19   transition from the underground mine to the open pit  
20   mine, correct?

21          A.       A major redesign of all of their  
22   facilities.

23          Q.       It built a new expanded mill with course  
24   or storage bins?

25          A.       Yes.



1           **Q.       And that was on land Chevron owned,**  
2       **correct?**

3           A.       I think so, yes.

4           **Q.       It built primary, secondary and tertiary**  
5       **crushers on land that Chevron owned?**

6           A.       They built everything they needed to  
7       develop the mine.

8           **Q.       On land that Chevron owned?**

9           A.       Some of it, and some of it was on federal  
10       land.

11          **Q.       Subject to a mill site claim?**

12          A.       That is correct.

13          **Q.       The land that ultimately became the open**  
14       **pit mine was owned by Chevron at that time, correct,**  
15       **at the start of development?**

16          A.       Well, I think there are different time  
17       frames of ownership. But I don't believe all of the  
18       land that was developed into the open pit was owned  
19       by Chevron as patented mining claims.

20          **Q.       So Chevron's open pit operations began in**  
21       **late 1965 and continued in earnest in early 1966?**

22          A.       That is true.

23          **Q.       And you heard Mr. Dewey testify yesterday**  
24       **about Chevron's mining claims for the open pit?**

25          A.       Yes.

1           Q.     And in those mining plans, Chevron  
2     discussed ways to dispose of waste rock?

3           A.     Absolutely.

4           Q.     And Chevron chose where to dispose of that  
5     waste rock?

6           A.     Yes.

7                     Depending on what period of time we are  
8     talking about here.

9           Q.     Sure.

10                    At the beginning of the open pit.

11           A.     That is correct.

12           Q.     And initially, Chevron did not choose  
13     these waste-dump areas based on any input from the  
14     United States?

15           A.     I think that is true, yes.

16           Q.     You heard Mr. Dewey testify about the west  
17     wall and what Chevron's engineers called Quivering  
18     Ridge; is that correct?

19           A.     I believe that is -- yeah, I didn't use  
20     the term Quivering Ridge, but yes.

21           Q.     So shortly after beginning open pit  
22     operations in 1967, there was a major fault in the  
23     west wall of the open pit?

24           A.     I think there was testimony that it was  
25     not a fault but there was a weakness.

1           Q.       But the weakness was on Chevron-owned  
2   land, correct?

3           A.       I would have to look at the maps and the  
4   patented or unpatented mining claims again, but I  
5   won't disagree with it.

6           Q.       And you heard Mr. Dewey testify about  
7   Chevron deciding to continuing mining and revising  
8   its mining plan in response to what has been called  
9   a fault?

10          A.       Yes.

11          Q.       The United States did not participate or  
12   make a decision for Chevron to continue its open pit  
13   mining under the new mining plan; is that correct?

14          A.       That is correct.

15          Q.       And the revised mining plan increased the  
16   waste ratio from about two-to-one to roughly  
17   ten-to-one; is that correct?

18          A.       That's correct.

19          Q.       So Chevron then needed to figure out a  
20   place to put all of this new waste rock, correct?

21          A.       That is correct.

22          Q.       So in 1968, at about the time of the  
23   discovery of the west wall issues, Chevron applied  
24   for patents on several mining claims around the open  
25   pit area.

1                   **Are you aware of those?**

2           A.       Absolutely.

3           **Q.       And the patents for those issued in two**  
4 **years later, in 1970?**

5           A.       That is right.

6           **Q.       But either with acquiring those**  
7 **additional -- that additional land, Chevron felt it**  
8 **was necessary to own additional or possess**  
9 **additional land in order to dispose of its waste**  
10 **rock, correct?**

11          A.       The mining claim is patented because there  
12 is mineral there. And in general, mining companies  
13 don't like to put waste upon their mineral land.  
14 They don't like to move waste twice.

15          **Q.       So Chevron felt it needed additional land**  
16 **in addition to that area so it wouldn't have to move**  
17 **the waste rock twice, correct?**

18          A.       Exactly.

19          **Q.       And another reason, perhaps, that Chevron**  
20 **needed the want of a different land was it was**  
21 **concerned with changes to the mining laws, at that**  
22 **time?**

23          A.       I don't think that had any bearing on the  
24 need for additional land.

25                   The mining operation is what determines

1     whether they needed additional land.

2           **Q.     A factor -- would you agree that a factor**  
3     **going into the consideration to own the land was the**  
4     **possible changes in the mining laws?**

5           A.     Yes, there -- that's the -- no doubt.

6           **Q.     So another idea that Chevron had was to**  
7     **apply for special use permits to dump the waste rock**  
8     **on these lands; is that correct?**

9           A.     I believe there is something in the record  
10    that said that Molycorp was pursuing a long-term  
11    special use permit.

12                   There was a lot of previous records that  
13    showed that it was really -- the Forest Service  
14    considered long-term special use permits. A lot of  
15    back and forth between the four supervisors' office  
16    and the regional office, well, should we issue  
17    special use permit or not issue special use permits.  
18    There are -- there are a half of -- so I suspect  
19    that is what that report was talking about, that it  
20    was a Forest Service idea and so they were pursuing  
21    that, at one time.

22           **Q.     Do you recall Mr. Dewey's testimony**  
23     **yesterday about Chevron was reluctant to use a**  
24     **special use permit or apply for a special use**  
25     **permit?**

1           A.       Yes.

2           **Q.       And some of the reasons that were**  
3           **expressed were because the special use permit could**  
4           **be withdrawn by the Forest Service, correct?**

5           A.       That is right, they are discretionary.

6           **Q.       And it could also require restoration of**  
7           **the land?**

8           A.       Yeah, I would assume that they could put  
9           any kind of stipulation you want in a special use  
10          permit.

11                   MR. HARRISON:  If we could show CX204 and  
12          pages one and two.

13          A.       But, that was -- that was -- a special use  
14          permit was not the preferred method for the land,  
15          you know, prior to the land exchange.

16          **Q       (By Mr. Harrison) The preferred method for**  
17          **Chevron or for the Forest Service?**

18          A.       For the Forest Service.

19          **Q.       But isn't it true that it also wasn't the**  
20          **preferred method for Chevron?**

21                   If we look at the top of page two here, do  
22          you see the sentence that says, "We are reluctant to  
23          reserve special use permits if they can be avoided"?

24          A.       Yes, absolutely.

25          **Q.       And the reasons explained there were the**

1 same reasons that Mr. Dewey testified about  
2 yesterday, correct?

3 A. That is correct. And it was also the  
4 position of the Forest Service not to issue special  
5 use permits for waste disposal.

6 Q. And Chevron never applied for a special  
7 use permit?

8 A. They did not.

9 Q. So another way for Chevron to acquire the  
10 land was for -- for the -- needed for the waste rock  
11 was to stake and patent mining and mill site claims  
12 in the area adjacent to the open pit; is that  
13 correct?

14 A. That is correct.

15 Q. And Chevron had staked mining and mill  
16 site claims in almost all of that area, prior to the  
17 1968 time period?

18 A. Absolutely.

19 Q. Encompassing something like 2,000 acres or  
20 more of land?

21 A. Well, just adjacent to the mining up area,  
22 that's correct.

23 Q. Are you aware that in 1971 Chevron  
24 estimated that it was only using about 400 acres of  
25 that area for dumping waste rock?

1           A.       Yes, I am. The Washington office of the  
2       Forest Service asked the regional office in  
3       Albuquerque to -- to determine the amounts of land  
4       that were being used by mining in the area. That  
5       was -- that request was made to Molycorp and  
6       Molycorp responded that it was around 400 acres that  
7       were currently being used for waste disposal on  
8       Forest Service land.

9           **Q.       And as part of that process, are you aware**  
10       **of internal communications at Chevron that said that**  
11       **they still require all of the lands involved in the**  
12       **land exchange, not just the acres involved in**  
13       **current dumping?**

14          A.       That's correct.

15          **Q.       And just so we are clear, we are talking**  
16       **about the area around and adjacent to the open pit,**  
17       **not anything on the other side of the highway and**  
18       **river, correct?**

19          A.       That is correct. By that time it was --  
20       it was clear that they weren't going to be using the  
21       other side.

22                   MR. HARRISON: So let's go back to CX204.

23                   This is a July 26, 1968 letter.

24                   If you can show the first paragraph,  
25       please.



1           Q        (By Mr. Harrison) I will give you a second  
2       to read this and then I will ask you a question.

3           A.       Okay.

4           Q.       So this is a letter from John Watson, who  
5       is one of Chevron's counsels, to vice president at  
6       Chevron, Mr. Kentro.

7                   Mr. Watson notes at the outset here that  
8       there are -- the mining claims have, quote,  
9       "doubtful discoveries."

10                   Do you see that?

11          A.       I do.

12          Q.       And so you can't patent mining claims  
13       without mineralization, correct?

14          A.       Absolutely right.

15          Q.       And so, in order for Chevron to acquire  
16       this land through the Mining Act patenting process,  
17       they would need to withdraw the mining claims and  
18       stake those as mill sites, correct?

19          A.       You wouldn't necessarily -- you wouldn't  
20       necessarily have to withdraw the mining claims. You  
21       could -- so you could still have mill sites on  
22       mining claims. It is no big deal.

23          Q.       And for the mill sites to be patented,  
24       Chevron would need current use at the time of the  
25       patent application for each of those claims?

1           A.       That's correct.

2           Q.       And Mr. Watson acknowledges that in this  
3 letter as well, in the second paragraph?

4           A.       That is right.

5           Q.       And at the time of this 19 --

6           A.       A mill site has to be presently used and  
7 occupied for those purposes, and that is what he was  
8 stating there.

9           Q.       And later in this letter, the third  
10 paragraph on the second page, Mr. Watson expresses  
11 concern about the lack of present use and occupation  
12 for these proposed mill sites.

13                   Do you see that?

14          A.       Yes.

15          Q.       To patent a mill site, the mining law  
16 requires that the mill sites not exceed 5 acres; is  
17 that correct?

18          A.       Yes.

19          Q.       Like you said, it also requires a current  
20 use, not a future use or a planned use?

21          A.       That is correct.

22          Q.       So is it fair to say that these legal  
23 requirements for the mill sites presented a  
24 challenge for Chevron if it wanted to apply for  
25 patents on these claims?

1           A.     Well, if they weren't being presently used  
2     and occupied, it would be a challenge.

3           Q.     And to get around that challenge, you  
4     heard Mr. Dewey testify yesterday that Chevron,  
5     quote, "devised a plan that worked around," end  
6     quote, the mill cited law.

7                     Do you recall that testimony?

8           A.     I do.

9           Q.     And that was the fan-shaped mill sites  
10    that were -- would run from the area near the open  
11    pit down to the highway, correct?

12          A.     I do, yes.

13                     MR. HARRISON: If we could show CX216 at  
14    page three.

15          Q     (By Mr. Harrison) These are the fan-shaped  
16    mill sites referenced by Mr. Dewey and in the  
17    July, 1968 letter?

18          A.     Yes.

19          Q.     And this is the area adjacent to the open  
20    pit up to the highway?

21          A.     Or down to the highway.

22          Q.     Or down to the highway, yes.

23          A.     Sure.

24          Q.     And so if this was found permissible, that  
25    would have allowed Chevron an easier time claiming

1     **use on the mill sites so that they could patent**  
2     **them; is that correct?**

3           A.     You know, it was a pretty innovative idea  
4     to think about, is that if you just put some waste  
5     on the top part of the mill site and it extends all  
6     the way down past the road, then you are occupying  
7     the entire mill site. It was kind of a funny way to  
8     do it.

9           **Q.     But that is not consistent with the**  
10    **requirements of the mining law, is it?**

11          A.     You know, I think that is a question  
12    because the mining law just talks about, you know,  
13    5 acres in size.

14                 What the Forest Service and the BLM prefer  
15    is that they be in, you know, 5-acre chunks,  
16    according to the rectangular survey system that is  
17    preferred.

18                 But I don't think there is anything in the  
19    mining law that says that has to be that way.

20          **Q.     Are you aware of any other set of mining**  
21    **or mill site claims that Chevron located at the**  
22    **Questa site that were fan-shaped or non-rectangular**  
23    **in shape?**

24          A.     No. No, I am not.

25          **Q.     And they located almost, if not over,**

1     **1,000 mill site and mining claims?**

2           A.     Well, I think a small number of mill  
3     sites, the tremendous amount of those load claims  
4     compared to mill sites.

5           **Q.     So Chevron was looking for an easier way**  
6     **to simplify the patenting process by coming up with**  
7     **the fan-shaped narrow mill site claims, correct?**

8           A.     They were thinking of an innovative way to  
9     do it.

10           THE COURT: Did they put waste all over  
11     those lines?

12           THE WITNESS: Pardon me, Your Honor?

13           THE COURT: Did they put waste all over  
14     those mill site lines?

15           THE WITNESS: Eventually. These were  
16     never -- these were never staked as mill sites.  
17     This was a sketch that was developed by Molycorp.

18           THE COURT: Was this before any patents  
19     were issued?

20           THE WITNESS: Absolutely.

21           **Q     (By Mr. Harrison) So this letter was**  
22     **July, 1968.**

23                   **Let's fast forward a few months to**  
24     **January, 1969.**

25                   **We have heard a lot about this**

1     **January, 1969 meeting between Chevron and the Forest**  
2     **Service.**

3             **And you heard that testimony in court,**  
4     **correct?**

5             A.     Yes.

6             Q.     **And the major topic of the meeting seemed**  
7     **to be this idea of a Red River Canyon tunnel fill**  
8     **idea, correct?**

9             A.     That is right.

10            Q.     **Do you agree that this would have been a**  
11     **major project?**

12            A.     Absolutely.

13            Q.     **Would it have required extensive design**  
14     **and planning?**

15            A.     Absolutely.

16            Q.     **Permitting from various governmental**  
17     **entities?**

18            A.     I don't know all the extent of the  
19     permitting that would be required from the state. I  
20     just don't know.

21            Q.     **But permits, in your experience, with a**  
22     **project like this, permits would be required?**

23            A.     Well, if they are required, they are, but  
24     I have no knowledge of what permits might be  
25     required in that case.

1           Q.     And would it have involved -- would a  
2     project like this have necessarily involved seeking  
3     public input and feedback, as well?

4           A.     It could have, sure. Yeah.

5           Q.     And if -- strike that.

6                     So at the January, 1969 meeting, the  
7     Forest Service suggested a land exchange, correct?

8           A.     No. It was the Forest Service that  
9     suggested the land exchange.

10          Q.     I think I said that but if I didn't, then  
11     I misspoke.

12          A.     Okay.

13          Q.     And Chevron agreed to prepare a map of the  
14     selected and offered lands following that meeting?

15          A.     That is correct.

16          Q.     And Chevron never presented a formal  
17     application to the Forest Service? Well, anything  
18     relating to the Red River -- Red River plan?

19                     THE COURT: Well, are we going to go into  
20     that proposed Red River overpass?

21                     MR. HARRISON: No, Your Honor. I have a  
22     few more questions on that before I get to a --

23                     THE COURT: Why do you have any questions  
24     on that?

25          Q     (By Mr. Harrison) In your direct testimony,

1     you took issue with the fact that the Forest Service  
2     never undertook an analysis of the Red River Canyon  
3     idea; is that correct?

4           A.     That's correct.

5           Q.     But, there was no way for them to do that  
6     without a formal submission?

7                   THE COURT: Counsel, why are you going  
8     there? I want you to move on. We have exhausted  
9     that topic.

10          Q     (By Mr. Harrison) Let's go back to the  
11     communications following the January, 1969 meeting.

12                   So three weeks after that, Chevron's  
13     lawyer wrote to the Forest Service to make  
14     application for the land exchange.

15                   Are you aware of that?

16          A.     I am aware of correspondence, yes.

17          Q.     And from that point forward, Chevron was  
18     fully intent on proceeding with the land exchange,  
19     correct?

20          A.     It was pretty urgent to proceed with it.  
21     They needed that -- that land for the waste  
22     disposal.

23                   MR. HARRISON: If we could show CX212.

24                   So this is the February, 1969 letter we  
25     were just discussing.



1           If we could turn to the top of page two.

2       And this letter, again, is from Mr. Watson,

3       Chevron's counsel.

4           **Q       (By Mr. Harrison) And it says that "Parcels**  
5       **one and two are practically covered with load-mining**  
6       **claims."**

7           **Do you see that?**

8           A.     Yes, sir.

9           **Q.       And parcels one and two, just so we are**  
10       **all clear, are for the -- the areas that ultimately**  
11       **ended up becoming the land subject to the land**  
12       **exchange, correct?**

13          A.     Yes.

14          **Q.       And then a few sentences down, it says,**  
15       **"In this same general area are two other claims, the**  
16       **Sugarloaf and Magnifico, which belongs to other**  
17       **persons."**

18          **Do you see that?**

19               MR. HARRISON: If we could just zoom back  
20       out, please. If we could go to the last paragraph.

21          **Q       (By Mr. Harrison) Mr. Watson writes that**  
22       **those who attended the meeting are, quote,**  
23       **"Sincerely appreciative of your suggestions, and**  
24       **thank you for your consideration of this matter."**

25          **Do you see that?**

1           A.       Yes.

2           Q.       There is nothing here to suggest that the  
3 meeting wasn't amiable or that -- not friendly?

4           A.       I think it was professional.

5           Q.       And so the Forest Service responded to  
6 Chevron's letter in April of 1969.

7                   Are you aware of that?

8           A.       I am sure they did.

9                   MR. HARRISON: If we could show CX216,  
10 please.

11           Q        (By Mr. Harrison) Looking at the third  
12 paragraph on the first page, the first sentence  
13 says, explains that "Unpatented mining claims would  
14 either have to be relinquished or adjudicated."

15                   Do you see that?

16           A.       Yes.

17           Q.       And by adjudicated, that means through a  
18 validity contest?

19           A.       That's correct.

20           Q.       And that makes sense that in order for the  
21 United States to be able to convey the land, it  
22 needed clear title on that land?

23           A.       That is correct.

24           Q.       So if Chevron did not want to relinquish  
25 the claims, they could have proceeded with the

1     **validity contest to clear those claims, the mining**  
2     **claims, from the land?**

3           A.     If they didn't want to relinquish the  
4     claims, they could go through a validity contest  
5     is --

6           **Q.     Yes.**

7           A.     -- that what you are asking?

8           **Q.     Yes.**

9           A.     They would want to contest their own  
10    claims, is that what you're asking?

11          **Q.     I'm just asking what the letter says in**  
12    **that respect with regard to the first sentence here.**

13          A.     The first sentence says, you've got two  
14    options, you can relinquish them or we can challenge  
15    them in a validity contest.

16          **Q.     In order for the land exchange to**  
17    **continue?**

18          A.     Correct.

19          **Q.     So that was a choice that Chevron could**  
20    **have made. They could have, instead of**  
21    **relinquishing them, could have offered to go through**  
22    **the validity contest?**

23          A.     They would ask for a validity contest with  
24    their own claims? I guess they could have, sure.

25          **Q.     And the relinquishment is held in escrow,**

1 correct?

2 A. Evidently.

3 Q. And if you would look about halfway down  
4 this paragraph, it says, "The relinquishments are  
5 not recorded or made a public record until the land  
6 exchange has reached the point of patent in the  
7 respective land."

8 Do you see that?

9 A. I do.

10 Q. And just again, so we are clear, we are  
11 talking about this land exchange is for the area  
12 adjacent to the open pit mine, nothing across the  
13 river or on the other side of the river?

14 A. That's correct.

15 Q. And in this letter, the Forest Service  
16 also expressed some concerns of Chevron's proposing  
17 of the fan-shaped mill sites; is that correct?

18 A. I would have to look further down the  
19 letter.

20 MR. HARRISON: If we could go to the top  
21 of the last -- the last paragraph of page one, top  
22 of page two.

23 A. Yes, it is in there.

24 Q (By Mr. Harrison) And I think you testified  
25 earlier that whether or not the permissibility or

1     whether or not it was permissible to use fan-shaped  
2     mill site was a question?

3           A.     Correct.

4           Q.     And the Forest Service also notes here  
5     that, quote, "The shape of the mill sites, as  
6     proposed by Molycorp, is also a matter of concern."

7                   Do you see that?

8           A.     I do.

9           Q.     And this is in addition to the concerns  
10    that Chevron's lawyers had already raised for  
11    itself, to Chevron's employees about the active and  
12    current use of mill sites, in order to have those  
13    patented, correct?

14          A.     Correct.

15          Q.     Your testimony is that this letter from  
16    the Forest Service threatened Chevron by suggesting  
17    a friendly validity contest.

18                   Is that still your testimony?

19          A.     Yes.

20          Q.     But isn't it more the case that the Forest  
21    Service is just ensuring that it is acting in  
22    compliance with its -- with the laws and  
23    regulations?

24          A.     Well, of course, the Forest Service and  
25    federal government acts in compliance with its laws

1 and regulations. There is no doubt about that.

2 Q. If there was a question, like you said,  
3 about the propriety of using the mill site claims in  
4 the fan-shaped manner that Chevron is proposing,  
5 that would be something that would need to be  
6 necessarily resolved, correct?

7 A. That, and the fact that there are fan  
8 shapes of mill sites would have to be resolved.

9 Q. You testified that a validity contest  
10 would take many years to resolve; is that correct?

11 A. Yes, I testified to that, and so did the  
12 Forest Service 30(b)(6) witness.

13 Q. And so CX216 is dated April 18, 1965.

14 If we go forward just a week -- a little  
15 more than a week later, Chevron also suggested that  
16 the Forest Service initiate a validity contest  
17 related to issues of the land exchange?

18 A. Correct.

19 MR. HARRISON: It is -- we can -- can we  
20 show CX218?

21 Q (By Mr. Harrison) So this is an April 30th  
22 letter from Chevron's counsel to the Forest Service.

23 Do you see that?

24 THE COURT: Yeah, 1969?

25 MR. HARRISON: 1969.

1           A.       I see the first page of it.

2                   MR. HARRISON: So if we can turn to the --  
3   the second page, the first full, the paragraph  
4   beginning with Mr. Koen.

5           Q        **(By Mr. Harrison) This refers to the**  
6   **April 18th letter that we were just looking at?**

7           A.       Yes.

8           Q.       And it says here -- I will give you a  
9   minute to read it.

10          A.       Okay, got it.

11          Q.       So this letter, just barely a week later,  
12   Chevron is suggesting to the Forest Service that it  
13   initiated a validity contest related to the land  
14   exchange, correct?

15          A.       On -- I guess on mining claims that it did  
16   not own.

17          Q.       And Chevron also inquired in this  
18   letter -- if we turn to the next page, first full  
19   paragraph -- "To avoid the situation, Chevron also  
20   inquired as to whether the Forest Service would  
21   initiate a quiet title action related to those  
22   mining claims that were not Chevron's."

23                   Is that correct?

24          A.       That were not Molycorp's, yes.

25          Q.       And Chevron wanted or needed these mining

1     **claims and title quieted so that the land exchange**  
2     **could be -- the land subject to the land exchange**  
3     **could be conveyed with clear title, correct?**

4           A.     That's correct.

5           Q.     And this letter also closes with "Permit  
6     **us to thank Mr. Parte and Mr. Ashby for your**  
7     **kindness and cooperation in this matter."**

8                   Do you see that?

9           A.     I do.

10          Q.     "Attorney is professional and friendly"?

11          A.     Absolutely.

12          Q.     And so throughout the rest of 1969 and the  
13     **following year, Chevron expressed continued interest**  
14     **in finalizing the land exchange, correct?**

15          A.     They had to have it.

16                   MR. HARRISON: If we could go to USX34.

17          Q     **(By Mr. Harrison) This is Chevron's formal**  
18     **land exchange application.**

19                   Do you see that?

20          A.     Yes.

21                   MR. HARRISON: And the transmittal letter  
22     is actually on pages five and six, so if we could  
23     show those.

24          Q     **(By Mr. Harrison) And it is dated**  
25     **November 5th, 1969?**



1           A.       Yes.

2                   MR. HARRISON:  If we go to page six, first  
3 full paragraph.

4           Q       **(By Mr. Harrison) It notes here that**  
5 **"Chevron will relinquish the unpatented mining**  
6 **claims when the land exchange is consummated."**

7                   Do you see that?

8           A.       I do.

9           Q.       And it is the future tense here, "when the  
10 exchange is consummated and will relinquish."

11          A.       That's correct.

12          Q.       And it again closes at the end with "Thank  
13 you again for your and your staff's assistance and  
14 cooperation in this matter."

15                  Do you see that?

16          A.       Yes, I do.

17                  MR. HARRISON:  I would move for the  
18 admission of USX34.

19                  THE COURT:  Any objection?

20                  MR. HARRISON:  No objections, Your Honor.

21                  THE COURT:  Without objections.

22                  (Exhibit admitted, USX34.)

23                  MR. HARRISON:  If we could show CX235.

24          Q       **(By Mr. Harrison) This is an April 30th,**  
25 **1970 letter to Molycorp's general manager, Colin**

1     **Campbell, from the Forest Service; isn't that**  
2     **correct?**

3           A.     Yes.

4           **Q.     Have you seen this document before?**

5           A.     I have.

6                   MR. HARRISON: Your Honor, I would move  
7     for admission of CX235.

8                   THE COURT: Any objections?

9                   MR. HOPSON: No objections.

10                   THE COURT: Without objections, it is  
11    admitted.

12                   (Exhibit admitted, CX235.)

13           **Q     (By Mr. Harrison) And if we look at this,**  
14     **the first sentence says that "It would be necessary**  
15     **for Molycorp to relinquish the mining claims prior**  
16     **to the issuance of a patent."**

17                   Do you see that?

18           A.     Yes.

19           **Q.     And then the second sentence of the second**  
20     **paragraph says that "The Forest Service will keep**  
21     **the relinquishment in escrow until we know that the**  
22     **patent will issue."**

23                   Do you see that?

24           A.     That is correct. That's what it says.

25           **Q.     And again, here it is future tense, will**

1     **relinquish. And it does not suggest anything that**  
2     **the claim had actually been relinquished, correct?**

3           A.     Well, I don't think they had been  
4     relinquished, at this time.

5           Q.     **Nothing to suggest here that the claims**  
6     **would be relinquished until the exchange was**  
7     **consummated, correct?**

8           A.     That is what this letter says.

9           Q.     **Do you have any reason to dispute that**  
10    **that was the process by which the relinquishment**  
11    **happened as part of this land exchange?**

12          A.     The Molycorp did relinquish the claims.  
13    Was signed by the general manager, I guess, that  
14    Molycorp notarized and given to the Forest Service.

15                 Whether or not that relinquishment, I  
16    guess you can -- you can argue whether a  
17    relinquishment that was signed and notarized was a  
18    relinquishment or not.

19          Q.     **So the other side of the land exchange**  
20    **deal, Chevron provided offered lands to the**  
21    **United States, correct?**

22          A.     That is correct.

23          Q.     **Are you aware that in 1972 Chevron**  
24    **provided a warranty deed for the offered lands?**

25          A.     Yes.

1           Q.     And the land exchange was finalized in  
2     1974?

3           A.     That is correct.

4           Q.     Is it your testimony then that the  
5     United States owned the warranty deed for the --  
6     owned the land, the offered lands, in 1972 prior to  
7     the consummation of the land exchange, simply  
8     because Chevron provided the warranty deed?

9           A.     I don't know. I have not really  
10    researched that, to be honest about it.

11          Q.     Chevron didn't do anything between the  
12    time of the relinquishment in May, 1970 to the  
13    finalizing of the land exchange in January of 1974  
14    to suggest that they didn't feel like they had the  
15    right of access to that property, correct?

16          A.     That's correct.

17          Q.     Chevron continued to dump waste rock on  
18    the land exchange while the land exchange was  
19    pending, correct?

20          A.     For sure.

21          Q.     Would you say it was business as usual?

22          A.     I don't think any mining operation is  
23    really business as usual.

24                   MR. HARRISON: If I could show CX306.

25                   So this is part of the land exchange file.

1 If we could go to page 168, the May 20th, 1970  
2 letter.

3 Q (By Mr. Harrison) Have you seen this letter  
4 before?

5 A. I have.

6 MR. HARRISON: Your Honor, I would like to  
7 move for admission of CX306.

8 MR. HOPSON: No objection.

9 THE COURT: Thank you.

10 Without objection, it will be admitted.

11 (Exhibit admitted, CX306.)

12 Q (By Mr. Harrison) And this is a letter from  
13 Chevron's counsel to the Department of Agriculture,  
14 the Forest Service?

15 A. Yes.

16 Q. If we look at the second paragraph here,  
17 it says, "We understand that you will hold the  
18 enclosed relinquishment until you are assured by the  
19 BLM that patent will issue in a few days to the  
20 selected lands involved in the land exchange."

21 Do you see that?

22 A. Absolutely.

23 Q. Again, it is future tense here, will hold  
24 until you are assured, correct?

25 A. Correct.

1           Q.     And we discussed this earlier, there was a  
2     reference to two outstanding mineral claims that  
3     Chevron did not possess as part of the land  
4     exchange. I believe those were the Sugarloaf and  
5     the Magnifico.

6                     Do you recall those?

7           A.     Yes.

8           Q.     Were those ultimately removed from  
9     Chevron's land exchange proposal and later patented  
10    in the 1980s?

11          A.     That's correct.

12          Q.     So around the same time or -- excuse me.

13                    In 1971, as part of the land exchange, the  
14    Forest Service prepared an environmental analysis.

15                    Are you aware of that?

16          A.     Yes.

17                    MR. HARRISON: If you could show CX281.

18          Q     (By Mr. Harrison) And this is the 1972  
19    Environmental Analysis.

20                    Have you seen this document before?

21          A.     I have.

22          Q.     And this was prepared as a result of the  
23    requirements under the National Environmental Policy  
24    Act of 1970, correct?

25          A.     Yes.

1           **Q.       Also, called NIPA?**

2           A.       Yes.

3           **Q.       If we could turn to page 17, in the middle**  
4 **paragraph that starts, "With Jack Watson from**  
5 **Molybdenum Corp., explained that the company**  
6 **prepared to exchange the land rather than acquire**  
7 **them through mill site applications."**

8                   **Do you see that?**

9           A.       Well, this was not in the EA unit, right?

10          **Q.       Correct. This is part of a transmittal**  
11 **letter transmitting the EA, I believe.**

12          A.       This has -- this is not a transmittal  
13 letter.

14          **Q.       Excuse me, a memorandum to file.**

15          A.       Okay. Granted.

16          **Q.       Thank you.**

17                   MR. HARRISON: If we could go -- now let's  
18 look at the Environmental Analysis. If we could go  
19 to page six, please, under "Adverse Environmental  
20 Effects Which Cannot Be Avoided."

21                   Do you see the sentence in the first  
22 paragraph that says, "The mining activities will  
23 still continue on the patented mining claims or on  
24 mill sites and are not dependent upon approval or  
25 disapproval of this land exchange proposal"?

1           A.       I do.

2           **Q.       Do you agree with that assessment?**

3           A.       Not exactly.

4                   And the reason I don't agree with it is  
5 because it was the Forest Service that disapproved  
6 of the use of mill sites. That is the whole purpose  
7 of this exchange and subsequent EA.

8           **Q.       So just to finish, the land exchange**  
9 **timeline, the Forest Service approved the**  
10 **environmental analysis in February 1972, correct?**

11          A.       That is correct.

12          **Q.       And then throughout the rest of 1972, the**  
13 **Forest Service approved the land exchange and**  
14 **instructed Chevron on next steps?**

15          A.       Well, the land exchange was consummated in  
16 1974, yeah.

17          **Q.       So --**

18          A.       So I don't understand your question.

19          **Q.       I will strike that.**

20                   **So after this -- so the land exchange was**  
21 **finalized in January of 1974, correct?**

22          A.       That's correct.

23          **Q.       A month after the land exchange, Chevron**  
24 **attempted or Chevron sought to protect their mining**  
25 **operations by locating more mining claims in the**



1     **area; is that correct?**

2           A.     Absolutely.

3           **Q.     And the reason -- the reason for that is**  
4     **so that their claims, the land that they owned and**  
5     **possible claims were contiguous?**

6           A.     That is true.

7           **Q.     And that would be done so Chevron would**  
8     **not have to deal with issues of --**

9           A.     Claim jumpers.

10          **Q.     Which we have talked about already.**

11          A.     Right. And this is the area just  
12     contiguous to the exchange boundary.

13          **Q.     Right.**

14                 **The little block?**

15          A.     That's right.

16          **Q.     Exactly.**

17                 **So the land exchange, Chevron received the**  
18     **same land that it would have received if it had gone**  
19     **through the patenting process; is that correct?**

20          A.     If they were allowed to have gone through  
21     patenting, I guess.

22          **Q.     And even if Chevron had decided to apply**  
23     **for patenting and was allowed to do so, Chevron**  
24     **would have still continued dumping waste rock on**  
25     **these areas; is that correct?**

1           A.       No, not exactly. I think that is what  
2       Dr. Rigby was talking about. If -- if Molycorp was  
3       allowed to have their mill sites in the way they  
4       wanted to, it would have been a totally different  
5       configuration of the waste dumps.

6           **Q.       But what we have talked about today with**  
7       **these letters and the mill sites is for mill sites**  
8       **on areas adjacent to the open pit and on the north**  
9       **side of the river and highway.**

10                   We haven't talked about anything going  
11       across the river and highway or on the other side,  
12       correct?

13           A.       We haven't but the Forest Service and  
14       Molycorp did.

15           **Q.       All right. Let's switch gears. I have**  
16       **just a few more things, and talk about Chevron's**  
17       **second underground blockade mine.**

18                   That began in the mid-1970s, that  
19       development?

20           A.       I think that is correct.

21           **Q.       And that was on land that Chevron owned**  
22       **outright?**

23           A.       I am not 100 percent sure on that.

24                   There were patents issued after that, I  
25       think -- well, maybe -- I would have to look at the

1 maps but you may be correct.

2 Q. The United States was not involved in  
3 Chevron's decision to explore for developer operate  
4 the new underground blockade mine, correct?

5 A. No, that was a Molycorp decision.

6 Q. You testified that the federal government  
7 wanted the Questa Mine developed in order to help  
8 spread economic development in Northern New Mexico;  
9 is that correct?

10 A. Yes.

11 Q. Is there anything wrong with that policy?

12 A. No.

13 Q. The federal government helped private  
14 entities and individuals all the time, correct?

15 A. Correct.

16 Q. And when it does, it is supposed to be in  
17 the public interest?

18 A. Yes.

19 Q. And advance the interest of the  
20 United States?

21 A. Yes.

22 Q. So it is not your testimony that the  
23 federal government's interest in promoting economic  
24 development was improper, is it?

25 A. No, just the opposite.

1           **Q.       And Chevron was a beneficiary of that**  
2     **policy, agreed?**

3           A.       Agreed.

4           **Q.       So if -- just to wrap up, so if the United**  
5     **States had restricted or withdrawn any of Chevron's**  
6     **mining claims or rights on the federal lands at**  
7     **issue here, would that have been improper?**

8           A.       Would you repeat that, please?

9           **Q.       Sure. Let me rephrase.**

10                   **If Chevron had restricted Chevron's mining**  
11     **rights, would that have constituted a taking?**

12           A.       You mean if the federal government had  
13     restricted Chevron --

14           **Q.       Yes.**

15           A.       -- or Molycorp's?

16                   MR. HOPSON: Objection. Calls for a legal  
17     conclusion.

18                   THE COURT: Sustained.

19           **Q       (By Mr. Harrison) You testified in your**  
20     **direct that you felt that it may constitute a**  
21     **taking; is that correct?**

22           A.       I would have to look at the exact words  
23     from that.

24                   MR. HARRISON: Could we show Fredley  
25     Direct 101, please.

1           **Q        (By Mr. Harrison) The answer at the bottom**  
2       **of the page, it says, "Question: But these laws**  
3       **don't let that kind of incident, patented claims or**  
4       **mining claims, with a mineral fine, do they?**

5                   **"Answer: No, generally not."**

6                   **Do you see that at the bottom?**

7           A.       Yes.

8           **Q.       And you say, "It doesn't want to effect a**  
9       **taking, which could be very costly for the**  
10       **United States."**

11                   MR. HOPSON: Objections, Your Honor. This  
12       is referencing the Wilderness Act and a  
13       congressional policy here. This has nothing to do  
14       with the analogous situation of taking away  
15       Chevron's mining claims.

16                   THE COURT: And where are you going with  
17       this?

18                   MR. HARRISON: I will move on, Your Honor.

19           **Q        (By Mr. Harrison) Chevron exploited the**  
20       **federal lands for its commercial gain, correct?**

21                   THE COURT: What do you mean by  
22       "exploited"?

23                   MR. HOPSON: Used it to benefit it  
24       commercially as part of its business.

25           A.       Yes.

1           Q        **(By Mr. Harrison) Chevron sought out the**  
2           **United States' assistance so it could further**  
3           **develop its mining operations; is that correct?**

4           A.       That is correct. And the federal  
5           government provided that assistance.

6           Q.       **And you have testified today and**  
7           **previously that you take no issue with the**  
8           **Government's actions in respect to many of those**  
9           **actions; is that correct?**

10          A.       That's correct.

11          Q.       **Chevron approached the United States in**  
12          **every one of those instances, correct?**

13          A.       That is correct.

14          Q.       **Chevron freely availed itself with every**  
15          **opportunity provided to it under the mining laws and**  
16          **regulations of the United States, correct?**

17          A.       Molycorp did.

18          Q.       **Just so we are clear when we are**  
19          **discussing Chevron today, it also means Molycorp and**  
20          **the predecessors?**

21          A.       Fair enough.

22          Q.       **Chevron entered federal lands without**  
23          **paying anything, correct?**

24          A.       Depending on the time frame, that is  
25          correct.

1           Q.       Chevron extracted minerals without paying  
2       any royalties to the United States, correct?

3           A.       Correct, except for the DMEA royalties.

4           Q.       And we discussed those, that it was a  
5       repayment -- interest-free repayment of the loan  
6       amount, correct?

7           A.       As a result of discovery, that is correct.

8           Q.       And we talked today about how Chevron  
9       treated the lands, as if they were their own with  
10      fences, security gates, security guards and whatnot,  
11      correct?

12          A.       We discussed that, and I believe that the  
13      fences and the security gates that you may be  
14      talking about, were on private land since 1924.

15          Q.       We looked at documents today where Chevron  
16      called the land its own and part of its land  
17      holdings, correct?

18          A.       That is, you know, somebody says, I own a  
19      mining claim, okay? Fair enough.

20          Q.       Chevron decided which claims -- strike  
21      that.

22                   Chevron was the one who decided which of  
23      its mining and mill site claims to apply for patents  
24      on, correct?

25          A.       Yes.

1           **Q.     And the United States, in all of these**  
2           **interactions, was simply responding to Chevron's**  
3           **request, correct?**

4           A.     For patent?

5           **Q.     Yes.**

6           A.     Yes.

7           **Q.     And in respect to the special use permit**  
8           **for the tailings pipeline, the United States would**  
9           **simply respond to Chevron's request for a permit,**  
10          **correct?**

11                   THE COURT: You are not going repeat  
12           everything you already asked, are you?

13                   MR. HARRISON: No, Your Honor. Just a few  
14           more questions.

15                   THE COURT: It is almost 12:00. I hope  
16           you are done by then.

17                   MR. HARRISON: We will be done by lunch?

18           A.     Yes.

19           **Q     (By Mr. Harrison) So in many respects, it**  
20           **was inevitable for the United States to interact**  
21           **with Chevron given that Chevron was mining on**  
22           **federal lands; is that correct?**

23           A.     For sure.

24           **Q.     And there is no legal reason why the**  
25           **United States could have shut down Chevron's mining**



1     **operations; is that correct?**

2           A.     There is no reason they would have.

3           MR. HARRISON: With the Court's

4     indulgence, just one minute.

5           THE COURT: Thank you.

6           MR. HARRISON: No further questions.

7           THE COURT: We will pick up redirect after  
8     lunch.

9           We'll be in recess until 1:30.

10          (A recess was taken.)

11          THE COURT: Good afternoon. You may be  
12     seated, and you may begin.

13          MR. HOPSON: Thank you, Your Honor.

14                   REDIRECT EXAMINATION

15          BY MR. HOPSON:

16          **Q.     Good afternoon. Remember to speak into**  
17     **the microphone, Mr. Fredley, okay?**

18          A.     Yes, sir.

19          **Q.     So do you recall Mr. Harrison asking you**  
20     **quite a few questions about the mining laws?**

21          A.     Yes.

22          **Q.     I want to jump to the bottom line here and**  
23     **get your opinion as a historian and an expert in**  
24     **mining on Federal lands and just ask you generally**  
25     **was it U.S. policy, at least prior to 1975, to**

1     **support and encourage mining on public lands?**

2           A.     Absolutely. The title of the 1872 mining  
3     law is an act to promote the development of mineral  
4     resources of the United States, and that policy  
5     continued all the way through to the 1970s.

6           Q.     **Focusing on the Questa site specifically,**  
7     **did the Forest Service and other agencies in the**  
8     **United States Government specifically support,**  
9     **encourage and enable the open pit mine at Questa?**

10          A.     Absolutely.

11          Q.     **Can you tell the Court briefly your**  
12     **understanding from the historical record of the**  
13     **reasons why they supported the open pit mine?**

14          A.     Several reasons. Number one, it was  
15     providing strategic minerals to the United States.  
16     It was providing employment to the local  
17     communities, it was a valuable resource.

18          Q.     **Let me ask you this, and we will move on.**  
19     **Without the U.S. Government's support, cooperation**  
20     **and encouragement, could open pit mining at Questa**  
21     **have occurred?**

22          A.     No.

23          Q.     **Do you recall the additional questions**  
24     **about whether the United States retains an interest**  
25     **in or the ability to control lands that have**

1     unpatented mining claims?

2           A.     Yes.

3           Q.     Did the U.S. Forest Service send Molycorp  
4     a bill for the value of certain timber that was  
5     destroyed when waste rock was placed on unpatented  
6     mining claims?

7           A.     I have seen that record.

8           Q.     Does that suggest to you that the  
9     United States continued to have an interest and  
10    ability to control land that has unpatented mining  
11    claims?

12          A.     Absolutely. It was Federal land under  
13    Federal control.

14          Q.     There was a question, as I recall, whether  
15    the Forest Service objected to the fan-shaped claims  
16    and that was the basis for rejecting the valley fill  
17    plan.

18                   Do you remember that question or  
19    questions?

20          A.     Yes, I do.

21          Q.     Do you recall that Mr. Dewey testified  
22    that Molycorp actually staked fan-shaped mill side  
23    claims in the Capulin Canyon?

24          A.     Yes.

25          Q.     Did the Forest Service object to those

1     **fan-shaped claims?**

2           A.     No.    The only claims of any shape that the  
3     Forest Service objected to were the ones involving  
4     the cross river area.

5           **Q.     And was there reason for objecting to**  
6     **those, the shape of the mill site claims?**

7           A.     At the cross river area because they  
8     didn't want Molycorp have mill sites across there  
9     and develop their first proposal for a cross river,  
10    crossroad waste dump.

11          **Q.     I want you to focus for a minute on the**  
12    **land that Molycorp obtained in the land exchange.**  
13    **And I just want to ask you this question:   Prior to**  
14    **January '74 when the land exchange was consummated,**  
15    **who owned that land?**

16          A.     Federal Government.

17          **Q.     Did the fact that mining claims were**  
18    **relinquished or in escrow change that in any way?**

19          A.     Absolutely not.

20                 MR. HOPSON:   I would like to turn,  
21    Ms. Hutchman, to U.S. Exhibit 520.

22          **Q.     (By Mr. Hopson)   Which I will tell you,**  
23    **Mr. Fredley, is the 1956 report to stockholders with**  
24    **Molycorp.**

25                 MR. HOPSON:   And if we could go to Page 4

1 of that, I believe it is the last page. And if you  
2 could please blow out the fourth paragraph from the  
3 bottom.

4 Q. (By Mr. Hopson) Which you were shown by  
5 Mr. Harrison during your cross-examination.

6 Do you recall reading that?

7 A. Yes.

8 Q. Mr. Harrison pointed out that this was  
9 prior to the execution of the DMEA contract,  
10 correct?

11 A. That is correct.

12 Q. But when, in fact, did Molycorp apply for  
13 the DMEA loan?

14 A. Several months prior to this document.

15 Q. This document is dated December 31st, I'm  
16 sorry, that is the year it is reporting. It is  
17 dated March 14, 1957. It is reporting on the year  
18 1956.

19 Do you recall when the DMEA contract was  
20 actually executed?

21 A. May 1957.

22 Q. So was the DMEA contract well underway by  
23 the time this report was written?

24 A. Pretty much.

25 MR. HOPSON: Let's please call up,

1 Ms. Hutchman, Chevron's Exhibit 216.

2 Q. (By Mr. Hopson) And this you will recall,  
3 Mr. Fredley, is a correspondence from the Department  
4 of Agriculture Forest Service to Mr. Watson, the  
5 Molycorp attorney, correct?

6 A. Yes.

7 Q. And this document, if you recall, contains  
8 the drawings of the fan-shaped claims?

9 A. Yes.

10 Q. I want to call out something else in here.

11 MR. HOPSON: Could we go to the second  
12 page, Page 2 of 8 and call out the final, second to  
13 the final paragraph.

14 Q. (By Mr. Hopson) Let's just take a second  
15 to look at that, Mr. Fredley.

16 The first sentence says, "We recognize  
17 that sufficient land adjacent to the mine for waste  
18 dumps must be made available to Molycorp by some  
19 means."

20 Based on your entire review of the record  
21 is that the Forest Service position that they must  
22 make land available for waste?

23 A. Yes.

24 Q. Prior to the time of the valley fill  
25 proposal did the U.S. Forest Service ever object to

1     **placing rock or waste on unpatented claims?**

2           A.     No.

3           **Q.     Let me ask you, do you recall that there**  
4     **is a regulation governing mill sites?**

5           A.     Yes.

6           **Q.     And it requires the mill sites to be**  
7     **5 acres, right?**

8           A.     That is correct.

9           **Q.     But it doesn't say anything about the**  
10    **shape?**

11          A.     That is right. I think that is Department  
12    of Interior regulations.

13                   MR. HOPSON: Let's call out 281,  
14    Chevron 281.

15          **Q.     (By Mr. Hopson) Mr. Fredley, you see here**  
16    **that this is the environmental analysis done by the**  
17    **Government in connection with the land exchange,**  
18    **correct?**

19          A.     Yes.

20          **Q.     I just want to call out one thing the**  
21    **Government says in this document, and it is at**  
22    **Page 6 of the original document, which is at Page 7**  
23    **of the PDF.**

24                   MR. HOPSON: One page prior, sorry,  
25    Ms. Hutchman. If you could call out the

1 alternatives to the proposed action.

2 Q. (By Mr. Hopson) Just take a quick look at  
3 that, Mr. Fredley, so we know what you are talking  
4 about here.

5 Have you had a chance to skim that?

6 A. Yes.

7 Q. I want to ask you about one sentence in  
8 the middle paragraph that begins, the second  
9 alternative this sentence begins, "Under the mining  
10 laws."

11 "Under the mining laws," the Government  
12 says, "the mining company has every right to use  
13 mill sites for waste disposal areas."

14 Is that statement that I just read  
15 consistent with your understanding of the constant  
16 Forest Service policy other than with respect to the  
17 valley fill plan?

18 A. Absolutely.

19 MR. HOPSON: Let's look at Chevron  
20 Exhibit 282.

21 Q. (By Mr. Hopson) This, Mr. Fredley, is the  
22 interim report of feasibility for the Questa site,  
23 correct?

24 A. Yes.

25 Q. Are you familiar with this document?



1           A.       Yes.

2                   MR. HOPSON:  Let's turn to Page 33 of 60.

3           Q.       (By Mr. Hopson)  You know that this is a  
4   report, Mr. Fredley, that is made in February of  
5   1972, right?

6           A.       Yes.

7           Q.       I want to call out what the language at  
8   the top of the page that says, "Present disposal  
9   areas."

10                   And I want to ask you about the first  
11   sentence, Mr. Fredley.  It says, "Most of the  
12   present waste is disposed on land that is the  
13   property of the Federal Government.  This is done  
14   with the cognizance and approval of the  
15   administrating agency, the U.S. Forest Service."

16                   If you will look back at your study of the  
17   record for many years, is that single statement  
18   consistent with your opinions and conclusions?

19           A.       Absolutely.

20           Q.       You were shown Chevron 186, which is an  
21   article written by Robert Carpenter later in time,  
22   1968.

23                   Do you recall that?

24           A.       Yes.

25           Q.       We don't need to call that up, but

1     **Mr. Harrison read a paragraph in which Mr. Carpenter**  
2     **talked about exploration for low grade ore occurring**  
3     **as early as 1953.**

4             **Do you recall him reading you that?**

5             A.     I do.

6             **Q.     Do you also recall that Dr. Rigby**  
7     **testified and others confirmed that there was no**  
8     **drilling at Questa prior to the DMEA contract.**

9             **Do you recall hearing that testimony?**

10            A.     I do.

11            **Q.     What does the historical record show?**

12            A.     The historical record shows without a  
13     doubt that there was no diamond drilling done at the  
14     Questa Mine prior to the DMEA.

15            **Q.     The article is in 1968, he is referring**  
16     **back to 1953. Did something important happen at the**  
17     **Questa Mine site between 1953 and 1968?**

18            A.     Well, development of a large low grade ore  
19     deposit.

20            **Q.     Do you think that might have influenced**  
21     **Mr. Carpenter's recollection of his own advice or**  
22     **perhaps his recounting of his own advice?**

23            A.     It very well could have.

24            **Q.     Mr. Carpenter never recommended looking**  
25     **for a low grade ore.**

1           A.       He did not.

2                   MR. HOPSON:   Ms. Hutchman, let's call up  
3   Chevron Exhibit 218, please.

4           Q.       **(By Mr. Hopson)   Take a look at that and**  
5   **just make sure you recall what this is about.   It is**  
6   **a letter from Mr. Jack Watson to the United States**  
7   **Department of Agriculture Forest Service, and it is**  
8   **dated April 30, 1969.**

9                   Do you recall being asked about this?

10          A.       Yes.

11          Q.       **Let me show you what you were asked about**  
12   **on Page 2 of 3.   Mr. Harrison called out language in**  
13   **the first full paragraph asking if the Forest**  
14   **Service would contest certain claims.**

15                  Do you see that language?

16          A.       Yes, I do.

17          Q.       **And he said, in essence, hey, this is,**  
18   **Molycorp's asking for validity contest, right?**

19          A.       Yes.

20          Q.       **What land, what challenge to the title is**  
21   **at issue here?**

22          A.       Two unpatented mining claims not owned by  
23   Molycorp.

24          Q.       **These are two claims on which individuals**  
25   **named Emma Lou Reach and David Williams are fighting**

1     **with Molycorp over the patenting, correct?**

2           A.     Correct.

3                   MR. HOPSON: If you will flip the page to  
4     Page 3, could you call out the paragraph that  
5     begins, "To avoid this situation."

6           **Q.     (By Mr. Hopson) What is Mr. Watson asking**  
7     **the Forest Service to do, as you understand it?**

8           A.     To bring some action to quiet the title so  
9     that the exchange would move forward.

10          **Q.     He is asking the Forest Service to do his**  
11     **work as an attorney because he is a good lawyer?**

12          A.     That is right.

13          **Q.     Is this in any way related to the Forest**  
14     **Service threatening a validity contest to shut down**  
15     **the valley fill plan?**

16          A.     No.

17          **Q.     Okay. Did the Forest Service threaten a**  
18     **validity contest for the purpose of shutting down**  
19     **the valley fill plan?**

20          A.     Yes.

21          **Q.     Did the Forest Service force the land**  
22     **exchange?**

23          A.     Absolutely, and the record is clear on  
24     that.

25          **Q.     And that resolved in a long angle of**

1     **repose waste piles above the Red River and the**  
2     **highway?**

3           A.     Absolutely. There is no question that the  
4     Forest Service made that the only option for  
5     Molycorp.

6           **Q.     All right.**

7           MR. HOPSON: Thank you. Mr. Fredley.  
8     Your Honor, I have nothing else.

9           THE COURT: Thank you. This witness may  
10    step down.

11           (Whereupon, the witness was excused.)

12           THE COURT: And you may call your next  
13    witness.

14           MR. HOPSON: I shouldn't have walked away.

15           Your Honor, Chevron calls Dr. Tim

16    Considine.

17           (Whereupon, the witness was sworn.)

18           THE DEPUTY CLERK: Please have a seat.  
19    State and definitely spell your last name, please.

20           THE WITNESS: My name is Timothy  
21    Considine, C-O-N-S-I-D-I-N-E.

22           MR. HOPSON: Mr. Considine, did you  
23    prepare written direct testimony in this case?

24           THE WITNESS: I did.

25           MR. HOPSON: Is that written direct

1 testimony accurate to the best of your knowledge?

2 THE WITNESS: Yes, sir, it is.

3 MR. HOPSON: Do you wish to make any  
4 changes, amendments or modifications to it?

5 THE WITNESS: No, I do not.

6 MR. HOPSON: Thank you. Your Honor, we  
7 tender Dr. Considine.

8 THE COURT: Very good, you may  
9 cross-examine.

10 (Dr. Timothy Considine's direct testimony  
11 was prefiled and admitted.)

12 THE COURT: You may proceed.

13 CROSS-EXAMINATION

14 BY MR. HOSHIJIMA:

15 Q. Dr. Considine, was Molycorp a for-profit  
16 company?

17 A. Yes.

18 Q. Was Molycorp engaged in commercial  
19 activity under the direction of its executives and  
20 Board of Directors?

21 A. I would presume so.

22 Q. Was all of that commercial activity  
23 conducted for the purpose of making a profit for its  
24 stockholders?

25 A. Yes, I believe so.

1           Q.     If the Questa Mine were not profitable,  
2     Molycorp could have stopped mining it at any time,  
3     correct?

4           A.     That is an option they could exercise,  
5     yes.

6           Q.     The Government never forced Molycorp to  
7     stay in business if it was unprofitable, did it?

8           A.     Not to my knowledge.

9           Q.     Let's turn to your direct testimony. You  
10    began your testimony by describing the Government's  
11    approach to molybdenum during World War II, correct?

12          A.     Yes, sir.

13          Q.     Was World War II during Molycorp's first  
14    underground mining phase?

15          A.     Yes.

16          Q.     That was the first of three phases of  
17    mining at the Questa site?

18          A.     Yes.

19          Q.     Was that the old underground mine that  
20    Molycorp operated until about 1956?

21          A.     Yes, it was.

22          Q.     During World War II were there a number of  
23    Government programs to simulate the production of  
24    various resources, including molybdenum?

25          A.     Yes.

1           **Q.       Did Molycorp participate in any of those**  
2   **programs?**

3           A.       As I described in my report, no.

4           **Q.       Did Molycorp receive Government aide**  
5   **through the defense planned corporation program?**

6           A.       No, they did not.

7           **Q.       Did Molycorp receive Government aide**  
8   **through the emergency planned facilities program?**

9           A.       No, they did not. And in my report I  
10   described the reasons why they did not. They were a  
11   fairly small operation and they were well on in  
12   their production period. They had been producing  
13   more than 20 years, at that point, and I judged that  
14   there were little incentives for them to adopt those  
15   offers.

16          **Q.       Did Molycorp receive Government aide**  
17   **through the necessity certificates program?**

18          A.       No.

19          **Q.       Do you agree, then, with Dr. Brigham's**  
20   **expert opinion that Molycorp received no Federal**  
21   **assistance through any World War II programs that**  
22   **were potentially available at that time?**

23          A.       Yes.

24          **Q.       Let's pull up your direct testimony and**  
25   **turn your attention to the testimony at the bottom**



1 of Page 6 to the top of Page 7.

2 Did you testify that the postwar decline  
3 in molybdenum production contributed to the  
4 United States passage of the Defense Production Act  
5 of 1950?

6 A. I think that was one factor in it. There  
7 were many considerations in the passage of that  
8 legislation. There was an expectation that world  
9 economic growth would accelerate into the future and  
10 there was overarching concern that resource  
11 availability could be an issue that would constrain  
12 the potential of the economy to grow.

13 Q. The Defense Production Act of 1950 was not  
14 specifically about molybdenum, was it?

15 A. As far as I understand it, it covered many  
16 nonfuel and nonfuel minerals, including molybdenum.

17 Q. The Defense Production Act, then, was a  
18 wide-ranging statute that had to be with expanding  
19 the supply of various materials not just molybdenum,  
20 right?

21 A. Yeah, I would agree with that, yes.

22 Q. So when you say that the decline in  
23 molybdenum production contributed to the passage of  
24 the Defense Production Act, you are not making that  
25 statement as an expert in mid-20th Century American

1     **history, are you?**

2           A.     Well, can you refer, give me a moment  
3     just --

4                   MR. HOPSON: Your Honor, could I remind  
5     the witness that he has a binder with all of his  
6     testimony sitting right there if he is looking for  
7     something else.

8                   THE WITNESS: Thank you.

9           A.     Yeah, I did mention, "The post-war decline  
10    in molybdenum production contributed to the  
11    United States Government's passage of the Defense  
12    Production Act of 1950."

13           **Q.     (By Mr. Hoshijima) Did you review the**  
14    **legislative history of the Defense Production Act in**  
15    **making that statement?**

16           A.     Not in great detail.

17           **Q.     So are you opining that molybdenum**  
18    **specifically was the reason that Congress decided to**  
19    **pass the Defense Production Act?**

20           A.     That was not my intent in that statement.  
21    I think it was a contributing factor.

22           **Q.     You don't have an opinion on the degree of**  
23    **contribution, though?**

24           A.     No.

25           **Q.     Let's keep moving forward in time.**

1                   **Did molybdenum participate in any**  
2   **Government incentive programs during the Korean War?**

3           A.       Not that I am aware of.

4           **Q.       The Korean War was also during the first**  
5   **underground mining phase, correct?**

6           A.       May I make a correction on that?

7           **Q.       Please.**

8           A.       When you asked did molybdenum contribute  
9   or participate in any Government programs during the  
10 Korean War, I answered with respect to Molycorp.

11                   I am not -- I believe other producers in  
12 the -- other molybdenum producers may have  
13 participated in those programs.

14           **Q.       My question was specifically about**  
15 **Molycorp.**

16           A.       Okay.

17           **Q.       To clarify the record, Molycorp did not**  
18 **participate in any Government incentive programs**  
19 **during the Korean War, correct?**

20           A.       Yes, that is correct.

21           **Q.       And, again, that was during the first**  
22 **underground phase?**

23           A.       Yes.

24           **Q.       Even without Government aide from these**  
25 **World War II or Korean War programs, Molycorp**

1     **profited from the first underground mine, correct?**

2           A.     Yes.

3           **Q.     By the mid-1950s the first underground**  
4     **mine was beginning to run out of ore, correct?**

5           A.     Yes, that is correct.

6           **Q.     You offer an opinion that Molycorp would**  
7     **not have undertaken any more exploration at the**  
8     **Questa site after that time without assistance from**  
9     **the DMEA, correct?**

10          A.     Yes. The way I viewed it was from a  
11     project finance standpoint where if Molycorp wished  
12     to find new reserves, they would have to explain  
13     their current production trajectory, which was  
14     approaching depletion, and it would be really  
15     difficult for them to make the case that what they  
16     were doing could be extended.

17                 It was a small operation and as the  
18     previous witnesses have described, they were  
19     primarily focused on one form of mining that did not  
20     include open pit mining but instead focused on  
21     underground mining following fairly high  
22     concentrated or veins.

23                 MR. HOSHIJIMA: Let's pull up that  
24     testimony on Page 11 of your direct exam.

25           **Q.     (By Mr. Todd) We are looking at a couple**

1 of questions and answers in the middle of that page.

2 This is a similar opinion to what  
3 Dr. Rigby and Mr. Fredley testified about earlier,  
4 right?

5 A. Yes, it is similar.

6 Q. Are you relying on their opinions or are  
7 you putting forth this opinion independently?

8 A. I am putting it forth independently based  
9 on my experience teaching mineral economics for more  
10 than 20 years at Penn State and working with mining  
11 engineers where I learned that the expenditures for  
12 the discovery of ore bodies is very high risk.

13 And then once that is established there is  
14 success, there are very significant capital  
15 expenditures that follow to identify, delineate and  
16 define the ore body and demonstrate to banks, in  
17 particular, that the development risk is lower and  
18 production could be at some point contemplated.

19 Q. Dr. Considine, my question was just  
20 whether you had an independent opinion. That is a  
21 yes or no?

22 A. That is a yes.

23 THE COURT: He answered the question.

24 MR. HOSHIJIMA: He answered a lot more  
25 than the question, Your Honor.

1           **Q.        (By Mr. Hoshijima) Were you in the**  
2       **courtroom yesterday listening to Dr. Rigby's**  
3       **testimony on this issue?**

4           A.       Yes.

5           **Q.        Were you listening to Mr. Fredley's**  
6       **testimony on this issue?**

7           A.       Yes, yes.

8           **Q.        In that case we will try to move through**  
9       **this fairly quickly.**

10                   Do you believe that Molycorp started a  
11       private exploration program in 1954, which was  
12       three years before the DMEA contract?

13           A.       When you use the term private, what was a  
14       private?

15           **Q.        A private exploration program?**

16           A.       Private exploration program. That seems a  
17       bit new to me. I know there was exploration --  
18       mining companies do exploration all the time.

19                   What I did in my research behind the  
20       expert report was I looked at the annual reports and  
21       one of the difficulties with looking at the annual  
22       reports and making inferences is that they cover the  
23       entire company, not just molybdenum production, but  
24       the other minerals that Molycorp produced.

25           **Q.        Let me make sure I understand the answer.**

1     **Are you saying that Molycorp did start a private**  
2     **exploration program at the Questa site in 1954?**

3           A.     When you say private exploration effort,  
4     it sounds like some sort of company, and I just -- I  
5     am unaware of that.

6           MR. HOSHIJIMA:   Can we pull up USX003,  
7     please, and turn to page -- well, let me show the  
8     cover first.

9           Q.     **(By Mr. Hoshijima) Do you recognize this**  
10    **as Molycorp's statement to the SEC?**

11          A.     Right, from 1964.

12          Q.     **And you see that at the very top of that**  
13    **document?**

14          A.     Yes, thank you.

15          MR. HOSHIJIMA:   Let's turn to Page 17.  
16    Can we magnify the second to the last paragraph  
17    starting with, "In 1954."

18          Q.     **(By Mr. Hoshijima) Dr. Considine, can you**  
19    **review this paragraph?**

20          A.     Yes, I remember reading this, awhile ago.

21          Q.     **Do you agree, then, that in 1954, which**  
22    **was three years before the DMEA contract, Molycorp**  
23    **started a privately-funded exploration program at**  
24    **the Questa site?**

25          A.     That is what the words say, yes.

1 MR. TODD: We can take that down.

2 Q. (By Mr. Todd) Do you agree with the prior  
3 testimony that Molycorp obtained millions of dollars  
4 in financing through bank loans and stock offerings  
5 in 1954 and '55?

6 A. I heard that in the previous testimony,  
7 and I believe it to be true.

8 Q. Any reason to believe that is not true?

9 A. No. I would add, though, that I believe  
10 those statements are based on the overall capital  
11 raising by the entire company. So it is not clear,  
12 and that is one of the difficulties I had in my  
13 research. In using the annual reports, they report  
14 consolidated income assets and activity. They have  
15 records broken down by commodity, but oftentimes the  
16 numbers are not as aggregated.

17 Q. Molycorp during this time period had  
18 operations outside of Questa, New Mexico, correct?

19 A. That is correct.

20 Q. What are some of those other operations?

21 A. As I recall, in the late '50s there was a  
22 mine, rare earths mine, a Columbian mine, and there  
23 were other properties that were in various stages of  
24 development, such as the Québec property previously  
25 discussed in prior testimony.



1           **Q.       Is it fair to say, then, that in this time**  
2           **period, and that is the 1950s, Molycorp is a company**  
3           **of international scope?**

4           A.       Yeah, yes.

5           **Q.       We talked about the bank loans and the**  
6           **stock offerings in the mid-1950s. Did that give**  
7           **Molycorp millions of dollars of cash in hand as of**  
8           **1955?**

9           A.       You know, I really can't say what their  
10          capital needs and there -- you know, when companies  
11          deal with capital, it is quite complicated and I  
12          didn't really have any insights into their sources  
13          and uses of capital other than just reading the  
14          annual reports.

15                 MR. HOSHIJIMA: Can we pull up USX519,  
16          which has been previously admitted.

17           **Q.       (By Mr. Hoshijima) Do you recognize this**  
18           **to be Molycorp's report to stockholders for the year**  
19           **ending 1955?**

20           A.       Yes.

21                 MR. HOSHIJIMA: Let's go to Page 6,  
22          please. If we can expand the top half of the page  
23          under Current Assets.

24           **Q.       (By Mr. Hoshijima) This is for the year**  
25           **1955. Molycorp has \$3.15 million in cash on hand,**

1       **correct?**

2           A.       Yeah, yes.

3           **Q.       In your direct testimony you discuss 2019**  
4       **dollars versus dollars of the day, let's say dollars**  
5       **in 1956.**

6                   Do you recall that?

7           A.       Yes.

8           **Q.       This \$3.15 million that Molycorp had on**  
9       **hand in 1955, that is worth a lot more than**  
10       **\$3 million is worth today, correct?**

11          A.       In today's dollars it would be larger than  
12       the numbers reported on the page here, yes.

13          **Q.       Many times larger?**

14          A.       Yes. But may I add a clarification here,  
15       firms use cash for a variety of uses. They have  
16       cash needs other than exploration, operations, and  
17       so on, payroll, benefits. There are many uses of  
18       cash.

19          **Q.       It would have been Molycorp's choice how**  
20       **to spend that cash?**

21          A.       Of course.

22          **Q.       It had a variety of options, including**  
23       **exploration, right?**

24          A.       Yes, yes.

25          **Q.       The Government had no say in how Molycorp**

1     **spent this cash, right?**

2           A.     Not that I am aware of.

3           MR. HOSHIJIMA:   We can take down this  
4     document.

5           **Q.     (By Mr. Hoshijima)   Dr. Considine, do you**  
6     **agree with Mr. Fredley's testimony that to obtain**  
7     **DMEA funding an applicant had to show the geologic**  
8     **probability of making a significant discovery?**

9           A.     Well, I am not really qualified as an  
10    economist to opine on that.   What I can tell you is  
11    that I read the supporting documentation and I  
12    notice that is the description of the DMEA program.

13           And what struck me was they had a table at  
14    the end of loans that -- the number of loans  
15    approved and denied.   And they mention in the  
16    narrative that one of the criteria was the presence  
17    or the possibility of reserves being at the  
18    location.

19           And that reminded me of an old adage in  
20    the oil industry that the best place to drill for  
21    oil is in an oilfield.   In other words, and this, I  
22    think this applies to minerals as well.   So if you  
23    already have a site that is in production, it is  
24    likely that there could be additional reserves  
25    nearby.   So, yes, I agree with Mr. Fredley's

1     assessment.

2           **Q.     To follow-up on that statement about the**  
3     **oilfields.**

4           A.     Yes.

5           **Q.     At the Questa site Molycorp had been**  
6     **mining molybdenum for decades, right?**

7           A.     Yes. When we are talking 1955, it would  
8     have been about 35 years, yeah.

9           **Q.     Given that, to obtain the DMEA funding**  
10    **Molycorp, had to demonstrate a significant**  
11    **probability of finding a discovery. Couldn't**  
12    **Molycorp have gone to a private lender with that**  
13    **same geological information and requested a loan?**

14          A.     Well, it is possible, but as I mentioned  
15    in my report that this mine, this particular mine, a  
16    fairly small mine by world standards, was nearing  
17    the end of its useful life. It was depleting. So  
18    it probably would have been a tough sell, if you  
19    will, on that basis.

20          **Q.     You can't rule out the possibility that if**  
21    **the DMEA contract had not been awarded Molycorp**  
22    **could have gotten a private lender to give it a loan**  
23    **based on that same geological information?**

24          A.     Well, anything is possible, but the fact  
25    of the matter is DMEA loaned Molycorp money and they

1 both entered an exploration effort. That is a fact.

2 Q. Do you recall how much money Molycorp was  
3 able to obtain from the DMEA in a loan?

4 A. It was about half a million dollars in  
5 dollars of the day --

6 Q. Was --

7 A. -- total, and then they shared their cost,  
8 50/50.

9 Q. The amount Molycorp got from the  
10 Government was no more than \$250,000, correct?

11 A. Yeah, it could have been slightly over  
12 that.

13 Q. \$255,000?

14 A. Yeah, that's correct.

15 Q. Do you recall the testimony from, I  
16 believe yesterday, that Molycorp did not actually  
17 even use that whole amount, it only used about  
18 \$200,000?

19 A. Yes, I recall that.

20 Q. Do you agree with the prior testimony that  
21 during the period of DMEA funding, which was about  
22 1957 to 1960, Molycorp spent over 1 million of its  
23 own money for exploration efforts?

24 A. That sounds about right, yes, I agree with  
25 that.

1           **Q.       Do you agree with the prior testimony that**  
2           **during the 1957 to 1960 time period Molycorp**  
3           **conducted thousands of feet of drifting and**  
4           **crosscutting on its own without the DMEA funding?**

5           A.       I heard that and I can't dispute that.  
6           Again, I am an economist, not a mining engineer. I  
7           was struck by Dr. Rigby's testimony that it was the  
8           geologic knowledge and expertise that the USGS  
9           shared with Molycorp that was quite valuable.  
10          Sometimes there are things that people do that  
11          aren't monetized, and this may be one example.

12          **Q.       Let's go up to Page 12 of your testimony.**  
13                   **In the second to the last answer on that**  
14           **page you say, and I am referring to the second half**  
15           **of that answer. "Molycorp would not have been able**  
16           **to borrow the money needed for this exploration**  
17           **before the Federal Government's DMEA loan."**

18          A.       Yes, that is clear.

19                   MR. HOSHIJIMA: And let's get rid of that  
20          magnification. And go to the next page.

21          **Q.       (By Mr. Hoshijima) In the second to the**  
22           **last answer on that page you say, "Molycorp could**  
23           **have never secured the necessary financing to**  
24           **delineate and develop the low grade ore body without**  
25           **the Government's certification."**

1                   **Is that your testimony?**

2           A.       Yes.

3           **Q.       The word "never" in there is very**  
4 **definitive, right?**

5           A.       Yes.

6           **Q.       You didn't qualify that statement in your**  
7 **direct testimony, did you?**

8           A.       Apparently not.

9           **Q.       But you didn't site any historical**  
10 **document in which a bank or lender says that it**  
11 **would not have provided a loan but for the DMEA**  
12 **certification, correct?**

13          A.       It is hard to find a counterfactual, I  
14 didn't look for it. I was just, again to reiterate,  
15 I was -- I viewed Molycorp at that point in time  
16 when the DMEA contract was struck in 1957 as a small  
17 company or a small operation that was sort of on its  
18 last legs and they needed outside help, primarily in  
19 terms of a paradigm shift on how they would look for  
20 extending their reserve base.

21          **Q.       At the beginning of that answer you said**  
22 **finding a counterfactual is difficult and you didn't**  
23 **look for one, right?**

24          A.       That is correct.

25          **Q.       And yet without having looked for a**

1     **counterfactual and recognizing that is not possible,**  
2     **you said that Molycorp could have never secured the**  
3     **necessary financing without the certification?**

4           A.     That is clear as a bell, right here on the  
5     screen. Again, I would like to remind you, the  
6     focus of my report was on quantifying the benefits  
7     from the Questa site.

8           **Q.     The focus of your opinion in this case was**  
9     **not about the DMEA?**

10          A.     Oh, I did mention DMEA but, you know, the  
11     core effort in the report was to determine the  
12     profitability of the mine, the state and local  
13     economic impacts, and the impacts on the overall  
14     molybdenum market.

15          **Q.     So it is not a core opinion that Molycorp**  
16     **could have never secured the necessary financing**  
17     **without the certification?**

18          A.     I would look upon it as my opinion as an  
19     economist based on the data and information I  
20     reviewed.

21          **Q.     Turning to Page 13 of your testimony at**  
22     **the top of that page you say that, "Molycorp**  
23     **borrowed and spent about \$50 million after the**  
24     **certification to prepare the open pit mine for**  
25     **operation."**



1                   **Do you see that?**

2           A.       Yes, I do. At the very top of the page?

3           **Q.       Yes.**

4           A.       Yes.

5           **Q.       That is part of your answer?**

6           A.       Yes.

7           **Q.       None of that money came from the**  
8 **United States, right?**

9           A.       As far as I know, that's correct, none of  
10 it did come from the United States.

11           **Q.       Now the figure in your report is**  
12 **50 million, but wasn't it more like \$110 million**  
13 **that Molycorp spent to develop the open pit mine?**

14           A.       Oh, the data that I used for cap X for the  
15 mine was based on a ten-year summary of mine  
16 performance dated 1975.

17                   And in the very first column where cap X  
18 prior to 1960, prior to the mine startup. And it  
19 was actually 43.06 million, so I don't know where  
20 the 110 million is coming from.

21           **Q.       I think you used the term cap X, which I**  
22 **am not familiar with. Can you explain that?**

23           A.       Capital expenditures. Upfront capital  
24 expenditures for the construction of the mine and  
25 supporting facilities.

1 MR. HOSHIJIMA: Let's pull up USX481,  
2 please. This is a document that has been previously  
3 admitted.

4 Q. (By Mr. Hoshijima) Do you recognize this  
5 as a 1957 Molycorp document entitled Questa Mine and  
6 Mill Fact Sheet?

7 A. Correct. It is November 1975. I see to  
8 date a total of 110 million has been invested.

9 Q. And you are referring to the top paragraph  
10 of this fact sheet?

11 A. Yes.

12 Q. The 110 million that has been invested,  
13 this is talking about the open pit mine at Questa,  
14 right?

15 A. Wait a minute. You know, actually when I  
16 read that paragraph it is kind of ambiguous whether,  
17 you know, they are including, you know, capital  
18 expenditures prior to the construction of the open  
19 pit mine.

20 So, and the other caveat with this number  
21 is when I did my profit evaluation and investment  
22 evaluation, the 43.06 that I just quoted you a few  
23 moments ago, that was for the open pit prior to '66.

24 Subsequent to that the -- there were  
25 numbers or expenditures for capital in subsequent

1 years and that is not included in the 43.06 that I  
2 quoted you as the upfront expenditures.

3 So, you know, you have to be careful on  
4 the numbers and what they include and it is not  
5 clear to me, you know, they mention in the first  
6 sentence high-grade underground mining operation.  
7 Are they including, you know, to date, well, what  
8 does that mean, going back to 1920 or 1966? It is  
9 not clear to me.

10 And that is sort of the test I used when I  
11 did my analysis. I was looking for numbers that  
12 were historically accurate and represented actual  
13 expenditures over a certain period of time.

14 **Q. Assuming that this 110 million-dollar**  
15 **figure includes investments dating back to the**  
16 **beginning of the first underground mine operation,**  
17 **would all of that money have been Molycorp's private**  
18 **finance?**

19 A. Well, that is a big assumption, one, but I  
20 will grant you if you assume that, what do you mean  
21 by private? I mean, it would be included in their  
22 assets and, you know, depreciated over time, and so  
23 on. I have no idea if this is a, you know, pre or  
24 post-depreciated capital, I don't know what it is.

25 These are the type of numbers I shied away

1 from in my analysis. Usually I focused my analysis  
2 based on accounting and financial records from the  
3 mine operation.

4 **Q. None of this \$110 million invested in this**  
5 **site would have come from the U.S. Government,**  
6 **right?**

7 A. Oh, well, there was the DMEA, well that  
8 was repaid and that was it, yeah, it was likely.

9 **Q. For \$200,000?**

10 A. Yeah, to the \$250,000.

11 **Q. Other than the DMEA, none of this \$110**  
12 **million in investment at the Questa site comes from**  
13 **the U.S. Government, right?**

14 A. Right. But I, you know, I really would  
15 like to impress upon the Court here that, you know,  
16 it is the -- there are a lot of good ideas that  
17 aren't monetized, you know, and this idea of  
18 searching for a low-grade ore body, convincing a  
19 mine that was in operation for more than three  
20 decades that they should have a paradigm shift and  
21 look elsewhere, have a different view of the mine,  
22 was a very important contribution by the USGS and  
23 the Bureau of Mines. And that is what those  
24 agencies do, they help industry.

25 **Q. \$200,000 that the DMEA contributed, that**

1     **number is less than a quarter of 1 percent of 110**  
2     **million, right?**

3           A.     Yeah, it is a small number, you know, if  
4     you are comparing it to a large number, but, again,  
5     I have to reiterate not all great ideas are  
6     monetized. In fact, many of the best ideas of all  
7     time are not monetized.

8           MR. HOSHIJIMA: I move to strike that  
9     answer as nonresponsive.

10          THE COURT: Overruled. You give it to the  
11     witness to answer, and he answered.

12          MR. HOSHIJIMA: You can take this down.

13          **Q.     (By Mr. Hoshijima) Would Molycorp have**  
14     **developed the open pit mine if it did not think it**  
15     **would be profitable?**

16          A.     No.

17          MR. HOPSON: Objection, calls for  
18     speculation.

19          THE COURT: Sustained.

20          **Q.     (By Mr. Hoshijima) Did Molycorp know that**  
21     **there was a risk that the open pit mine would not be**  
22     **profitable?**

23          MR. HOPSON: The same objection.

24          THE COURT: Overruled.

25          A.     Please repeat the question.

1           **Q.       (By Mr. Hoshijima) Did Molycorp know**  
2       **there was a risk that the open pit mine would not be**  
3       **profitable?**

4           A.       Oh, I have no factual basis to answer that  
5       question, I really don't know.

6           **Q.       You have no idea if Molycorp knew about**  
7       **the risk of a lack of profit at the open pit mine?**

8           A.       Well, let me say this: I took a look at  
9       the mine feasibility analysis that was discussed and  
10      brought up in previous presentations and it is a  
11      very long document, lots of numbers. And one thing  
12      that was not done, as far as I can tell from a quick  
13      scan of the documents, is a risk analysis.

14                   And a risk analysis is a fairly  
15      complicated mathematical technique where you  
16      recognize the uncertainties of certain parameters  
17      that guide your investment valuation such as price  
18      or cost or stripping, for instance, that was not  
19      done. But I am sure that the people who prepare  
20      those numbers, especially the people who did the  
21      computations had a feel for the sensitivity of the  
22      bottom line estimate to certain key consumptions.

23                   MR. HOSHIJIMA: Let's pull up USX003.  
24      Let's turn to Page 5, please.

25           **Q.       (By Mr. Hoshijima) Did Molycorp estimate**

1     **in this SEC filing that the cost of preparing the**  
2     **open pit mine and preparing it for production is**  
3     **approximately 27 and a half million?**

4           A.     Yes, that is stated in the paragraph, and  
5     I recall reading about this and noted that this  
6     document was prepared, I believe, in 1964 several  
7     years prior to the actual opening of the mine, the  
8     open pit mine.

9           **Q.     To come up with 27 and a half million to**  
10    **develop the open pit mine, Molycorp borrowed a lot**  
11    **of money, right?**

12          A.     I presume so, but I didn't really look at  
13    the debt equity sources of financing. But previous  
14    testimony indicated, identified a couple of banks  
15    and I would imagine most of this capital was  
16    obtained from bank loans.

17               MR. HOSHIJIMA: Let's magnify the last  
18    paragraph on this page, please.

19          **Q.     (By Mr. Hoshijima) Do you see where it**  
20    **says, "As a result of the bank loans and the sale of**  
21    **the debentures offered hereby, the company will**  
22    **incur an aggregate indebtedness of nearly 32 and a**  
23    **half million dollars."**

24          A.     Yes, I see that.

25          **Q.     That was considerably in excess of the**

1     **company's total assets and net worth, correct?**

2           A.     That is what the words read, yes.

3           **Q.     Is incurring that amount of debt a risky**  
4     **thing for a company to do?**

5           A.     Well, I am an economist, not a financier,  
6     but companies incur debt all the time. Some have  
7     very high levels of debt relative to their assets.  
8     It varies by the industry.

9           MR. HOSHIJIMA: Turning to the next page  
10    of this document. Let's magnify the last paragraph  
11    before the heading, Subscription Offer.

12          **Q.     (By Mr. Hoshijima) Did Molycorp**  
13     **recognize, "The risks inherent in all mining**  
14     **venture, many of which risks arise by reason of**  
15     **conditions which may be beyond the control of the**  
16     **company"?**

17           THE COURT: What is your question?

18          **Q     (By Mr. Hoshijima) I am asking if Molycorp**  
19     **recognized the risk in 1964 of open pit mining?**

20          A.     There is really no basis in my analysis.  
21     It really wasn't a focus of my analysis, and it  
22     would only be speculative on my part to say whether  
23     Molycorp can, as you asked, considered the risks. I  
24     am sure they were aware of them but, you know, I  
25     can't get inside the heads of the people who were



1 making these decisions back then.

2 Q. In this Molycorp document, Molycorp tells  
3 investors to consider these risks, right?

4 A. Yeah, that is what this paragraph is  
5 intending to communicate, the inherent risks and  
6 these are all accurate that are associated with any  
7 mineral investment property.

8 Q. One of the risks listed in this paragraph  
9 is a change in economic and general conditions?

10 A. Where are you, on the third line? Yes,  
11 okay. Yes.

12 Q. Another risk to Molycorp was, "the  
13 development of additional sources of molybdenum and  
14 competing metals and products"?

15 A. That's correct.

16 Q. Another risk that Molycorp was aware of  
17 was that, "there may be changes in the price and  
18 market conditions for molybdenum products"?

19 A. That is what the paragraph reads, yes.

20 Q. And another risk that Molycorp was aware  
21 of was that, "construction delays and other factors  
22 might affect the capital cost of the project and the  
23 cost of mining and production"?

24 A. That is correct.

25 Q. Despite knowing those risks, Molycorp

1       **decided to go forward with the open pit mine, right?**

2           A.       They made that decision, yes.

3           **Q.       They made that decision voluntarily?**

4           A.       Yes.

5           **Q.       Did that risk pay off?**

6           A.       Well, according to my analysis, both the  
7       open pit mine and the underground mine lost money.

8           **Q.       Did the fact that the business risk did**  
9       **not pay off mean that Molycorp should not be**  
10       **responsible for environmental consequences?**

11          A.       No, I believe Molycorp and Chevron are  
12       agreeing to shoulder their share of the cost,  
13       whatever is decided.

14          **Q.       You opine that Molycorp's open pit mine**  
15       **and second underground mine were unprofitable,**  
16       **correct?**

17          A.       Yeah, that is what my analysis shows.

18          **Q.       To reach that conclusion you used a before**  
19       **tax cash analysis, correct?**

20          A.       Yes. Well, I actually compared that to a  
21       GAAP analysis, Generally Approved Account Procedure  
22       Analysis, and both methods show that the mine lost  
23       money for the open pit.

24                   I just did it before tax cash analysis for  
25       the second underground mine.

1           **Q.       The approach you discuss in your direct**  
2       **testimony is just the before-tax approach, correct?**

3           A.       Well, I recommend that approach but I do  
4       present by way of comparison the conventional  
5       approach where you capitalize stripping costs, and  
6       other costs.

7           **Q.       Does that analysis take into account any**  
8       **impacts of taxes on the economics of the open pit**  
9       **mine?**

10          A.       No. I used the convention in mineral  
11       economics that projects are evaluated on a  
12       before-tax basis.

13          **Q.       A company can sometimes use losses to**  
14       **offset tax liabilities, correct?**

15          A.       That is correct, however, like I said, the  
16       convention in mineral economics is to look at,  
17       essentially, the cash flow. How much money is  
18       coming in the door to support the operation and how  
19       much money is going out the door to run the  
20       operation. And that is kind of the gold standard in  
21       financial analysis.

22               In fact, a lot financial analysts today  
23       look at tech companies the same way. Tech company  
24       may look good on an after-tax basis, but when you  
25       look at it on a tax -- on a before-tax cash flow

1 basis, it may not look so good. So really kind of  
2 gives you a true picture of the cash generating  
3 capability of the enterprise.

4 **Q. Let me be clear. The approach you used**  
5 **did not take into account the tax effects?**

6 A. That is correct.

7 **Q. Did Molycorp have other --**

8 A. I have a caveat on that, only to the  
9 extent my subsequent analysis, I did in the economic  
10 impacts track the taxes that Molycorp paid for  
11 concentrate Social Security taxes, and state and  
12 local taxes.

13 **Q. Did Molycorp, and we are talking about the**  
14 **open pit mine period, have other assets other than**  
15 **at Questa that might have resulted in taxable income**  
16 **even when it was taking a loss at Questa?**

17 A. Yeah, that is possible, but, again, the  
18 question that I focused on in my study was what was  
19 the financial viability of the Questa Mine because  
20 the focus here is who is going to pay for the cost  
21 of environmental remediation.

22 So Questa, the operators of Questa and its  
23 financial viability at the mine was the core issue.

24 MR. HOSHIJIMA: Let's turn to CX123,  
25 please. Let's turn to the next page after this.

1           **Q.       (By Mr. Hoshijima) Do you see this is**  
2           **Molycorp's 1963 annual report?**

3           A.       That is indicated on the top left, yes.

4           MR. HOSHIJIMA: I move to admit CX123.

5           MR. HOPSON: No objection, Your Honor.

6           THE COURT: With that objection, 123 is  
7           admitted.

8                   (Exhibit admitted, CX123.)

9           **Q.       (By Mr. Hoshijima) This annual report is**  
10          **from 1963 which is why Molycorp is developing the**  
11          **open pit mine, correct?**

12          A.       Yes.

13          MR. HOSHIJIMA: Let's magnify the third  
14          paragraph under Financial. The paragraph above  
15          that, please.

16          **Q        (By Mr. Hoshijima) This report by Molycorp**  
17          **says that in 1963, which was just before it started**  
18          **the open pit mine, the company's financial condition**  
19          **was the strongest in its history, correct?**

20          A.       That is what it says, yeah.

21          MR. HOSHIJIMA: Let's take down that call  
22          out and pull up the last paragraph under Financial.

23          **Q.       (By Mr. Hoshijima) Do you see where it**  
24          **says that Molycorp took the exploration and**  
25          **development expenditures at the Questa site and**

1     deducted it for income tax purposes and eliminated  
2     the entire 1963 income tax liability for the parent  
3     company?

4           A.     Yes, that is what it says.

5           Q.     Well, Molycorp benefited financially as a  
6     company as a whole from this particular expense,  
7     right?

8           A.     That is what the passage says, yes, that's  
9     correct.

10          Q.     In fact, not only did Molycorp use its  
11     exploration expenditures at the open pit mine to  
12     write off its entire 1963 income tax liability, but  
13     it also got refunds for income taxes for prior  
14     years, correct?

15          A.     Yeah. That is explained by our tax laws.

16          Q.     Your analysis, though, was that before tax  
17     analysis, which did not take into account this sort  
18     of thing, correct?

19          A.     That's correct because, again, I was  
20     focused on the economic viability of the Questa Mine  
21     and I did not have the detailed data that would be  
22     required to do a complete disaggregation and  
23     allocation of any sort of tax benefits recognizing  
24     that this was a multi-product operation. It was a  
25     very complicated accounting exercise, essentially.

1     There was no breakouts of, you know, cash flow from  
2     rare earths and the other enterprises that Molycorp  
3     had. And, again, the convention in mineral  
4     economics is to look at projects on a before-tax  
5     basis because taxes can get very complicated, they  
6     vary by jurisdiction, you know, country by country,  
7     state by state, depletion allowances and so on. So  
8     it is hard to get an apples to apples comparison of  
9     projects.

10           **Q.     Taking you back to the beginning of that**  
11           **answer, you did not do the detailed analysis that**  
12           **would have been necessary to say whether the**  
13           **Molycorp company as a whole benefited financially**  
14           **monetarily from the Questa Mine, right?**

15           A.     Yes. And the reason I didn't is I didn't  
16     have the data.

17           **Q.     To clarify, when you said yes, did you not**  
18           **do that detailed analysis, correct?**

19           A.     I did not do the detailed analysis.

20                   THE COURT: He said that, Counsel, four or  
21     five times.

22           **Q.     (By Mr. Hoshijima) You opined that the**  
23           **Questa open pit mine was not profitable for two main**  
24           **reasons, correct?**

25           A.     Yes.

1           **Q.       The first of those was that it encountered**  
2           **higher than expected stripping costs, correct?**

3           A.       Correct.

4           **Q.       Was the second that they had fluctuations**  
5           **in places?**

6           A.       I believe I said in my report that when  
7           prices eventually went up in the mid-'70s production  
8           at Questa's open pit mine was declining. So they  
9           were sort of at the -- sort of an unfortunate  
10          sequence of events where their production in the  
11          open pit was declining and they weren't able to  
12          capture additional revenues. Prices soared in the  
13          late '70s to offset their prior losses.

14          **Q.       Let's put that aside and start with your**  
15          **first reason, which has to do with stripping costs?**

16          A.       Yes.

17          **Q.       Before developing the open pit mine,**  
18          **Molycorp estimated what it felt its costs would be,**  
19          **right?**

20          A.       Yes. I did previously mention the  
21          feasibility report and in that report, estimated  
22          costs were projected.

23          **Q.       But much more than Molycorp expected had**  
24          **to do with the move to open pit mine?**

25          A.       That is correct.



1           **Q.       That is because it encountered an**  
2           **instability in the west wall of the open pit mine?**

3           A.       Again, I am not a mining engineer. I was  
4           just looking at the numbers and I saw the stripping  
5           costs jump up and I was just looking at the cost  
6           numbers. I didn't look at the causation.

7           **Q.       You don't know what caused the increased**  
8           **stripping costs in the mid-1960s?**

9           A.       I said through the previous testimony, I  
10          think it is pretty clear that there was some sort  
11          of, you know, slide, whatever you want to call it,  
12          technical term. It just said we moved more earth  
13          which meant more diesel fuel costs and equipment  
14          time and labor to move all the material. And that  
15          showed up in my cost numbers.

16          **Q.       When the stripping costs increased above**  
17          **what was initially anticipated, Molycorp decided to**  
18          **continue open pit mining anyway, right?**

19          A.       The record shows that production continued  
20          from 1966 through 1981.

21          **Q.       Even though Molycorp knew that decision**  
22          **would result in far more waste rock having to be**  
23          **disposed?**

24          A.       Yeah, I just looked at the numbers.  
25          Again, you know, I just took it as a given. I

1 didn't really make any connection with their  
2 operational decisions and whether or not they should  
3 have pursued it.

4 **Q. The instability that Molycorp encountered**  
5 **that resulted in these increased stripping costs, is**  
6 **that the kind of risk that Molycorp knew about**  
7 **before it started open pit mining?**

8 A. Oh, I can't speak for the engineers and  
9 the project managers. It certainly was a  
10 discontinuous event there. I can't recall the exact  
11 year, I think it was '69 or '70 where stripping  
12 costs jumped up very abruptly and that looks to me  
13 like a surprise, excuse me.

14 **Q. Isn't that kind of unexpected geological**  
15 **finding the exact kind of risk that Molycorp**  
16 **described in that SEC document we saw earlier?**

17 A. Yeah, it would be consistent with that,  
18 but those, I mean, things happen.

19 **Q. You testified also that operating profits**  
20 **started falling significantly starting 1977,**  
21 **correct?**

22 A. Yeah, I believe that is the -- your  
23 question was operating profit or costs?

24 **Q. Operating profits.**

25 A. Operating profits, yeah, it looked like

1 they really started going down in 1977, you are  
2 right.

3 **Q. Was that the same year that there was a**  
4 **massive rock slide in the open pit mine that shut**  
5 **off half of the pit's capacity?**

6 A. You know, I really didn't track that. I  
7 mean, I heard about the slide, but I was really kind  
8 of focused on the numbers and just took them. I  
9 didn't think it was important to pull in my  
10 analysis, I don't know.

11 MR. HOSHIJIMA: Could we pull up Dewey  
12 direct exam, PDF Pages 17 to 18. The Dewey direct  
13 exam. Let's go down another page, bottom of Page 18  
14 to 19, please. Let's expand the answer starting  
15 with, "Yes, when the company signed." I'm sorry,  
16 that's not the right one. Let's take it off. Let's  
17 take down this document.

18 **Q. (By Mr. Hoshijima) You also analyzed the**  
19 **profitability of the second underground mine, right?**

20 A. Yes, sir.

21 **Q. Is Molycorp's decision to shift the mining**  
22 **back underground?**

23 A. Pardon?

24 **Q. Was it Molycorp's decision to shift the**  
25 **mining back underground?**

1           A.       Yes.

2           **Q.       Did Molycorp incur a capital cost of**  
3           **developing the second underground mine of**  
4           **\$250 million?**

5           A.       Yes.

6           **Q.       None of that came from the United States,**  
7           **right?**

8           A.       Correct.

9           **Q.       By then, though, the molybdenum prices had**  
10          **dropped, right?**

11          A.       What year?

12          **Q.       1983 when the second underground mine**  
13          **started production.**

14          A.       Yes, yes 1983, yeah.

15          **Q.       You opine later in your direct testimony**  
16          **that the Government sales from the stockpile could**  
17          **have affected the market prices of molybdenum?**

18          A.       Yes. I did a market simulation of during  
19          the period, I think, it was 19- -- in the '60s  
20          through the mid-'70s the stockpile for molybdenum  
21          was eliminated by 1975. And, yes, I presented  
22          evidence that showed that the sales from the  
23          stockpile reduced market prices.

24          **Q.       The last sale was 1975, so that would have**  
25          **nothing to do with the unprofitability of the second**

1     **underground mine, right?**

2           A.     That's correct.

3           **Q.     You didn't analyze the current financial**  
4     **status of Chevron, did you?**

5           A.     You mean in 2020?

6                   MR. HOPSON:  Objection, relevance of  
7     Chevron's current financial situation.

8                   THE COURT:  Sustained.

9           **Q     (By Mr. Hoshijima) Does Molycorp now own**  
10    **the property at the Questa Mine?**

11          A.     My understanding, I visited it a few years  
12    ago, Chevron owns the property and there is  
13    facilities operating there.

14          **Q.     Chevron owns the property, not Molycorp?**

15          A.     Yeah.

16          **Q.     Chevron would benefit from any future**  
17    **increases in the value of the property once it is**  
18    **cleaned up, correct?**

19          A.     Yeah, I presume so if they are the owner.  
20    As the previous witnesses have described, there is  
21    kind after complex mosaic of landownership because  
22    you are in a forest land and BLM land, so I am not  
23    sure what the footprint is.

24                   MR. HOSHIJIMA:  Let's pull up CX487,  
25    please.

1           **Q.       (By Mr. Hoshijima) Is this a figure from**  
2           **your direct testimony that shows your estimate of**  
3           **labor income from the open pit mine?**

4           A.       Yes, yes.

5           **Q.       In the first column the wages and salaries**  
6           **were paid to Molycorp employees, right?**

7           A.       Correct.

8           **Q.       Employees like Mr. Dewey?**

9           A.       I am not sure if Mr. Dewey is still  
10          working with Molycorp.

11          **Q.       These wages and salaries weren't paid to**  
12          **the United States, were they?**

13          A.       No, they are paid to individuals who paid  
14          taxes to the United States.

15          **Q.       The second column, benefits.**

16          A.       Yes.

17          **Q.       Is that referring to benefits to Molycorp**  
18          **employees like pensions, vacation and health**  
19          **insurance?**

20          A.       Yes.

21          **Q.       Those numbers in that second column, they**  
22          **are not paid to the United States, are they?**

23          A.       Well, every employee that's supported by  
24          health care is one less employee that has to be  
25          supported by the Government.

1           **Q.       Looking at the indirect column, indirect**  
2           **income in the fourth column.**

3           A.       Yes.

4           **Q.       Do those values represent Molycorp's**  
5           **purchases of goods and services from other local**  
6           **businesses?**

7           A.       Yeah, they are so-called supply chain or  
8           indirect impacts.

9           **Q.       The numbers in that column aren't figures**  
10          **paid to the United States, correct?**

11          A.       Not directly, but there are indirect  
12          impacts on the finances of all levels of Government,  
13          because any business activity generates tax revenue.

14          **Q.       Specifically the numbers in the fourth**  
15          **column of your figure represent dollar amounts paid**  
16          **to other businesses in the area, right?**

17          A.       It is labor income, yes, from supporting  
18          industries, that is correct.

19                 MR. HOSHIJIMA: Let's turn to CX488, which  
20          is a figure cited in your direct exam.

21          **Q.       (By Mr. Hoshijima) This is a table of**  
22          **state and local taxes resulting from the open pit**  
23          **mine, correct?**

24          A.       Yes.

25          **Q.       These numbers are paid to the State of**

1     **New Mexico and the county?**

2           A.     Yeah, and any other special districts like  
3     fire, schools, you know, every municipality has a  
4     different arrangement of those.

5           **Q.     None of these numbers in this figure**  
6     **represent numbers paid to the Federal Government,**  
7     **right?**

8           A.     Yeah, the table is entitled State and  
9     Local Taxes. That is correct.

10          **Q.     Let's turn to Federal taxes. The**  
11     **United States did not tax Molycorp any differently**  
12     **from any other business, did it?**

13          A.     I don't believe so. I didn't see any  
14     special provisions I just see --

15                 MR. HOSHIJIMA: Let's turn to CX489.

16          **Q.     (By Mr. Hoshijima) Is this your estimate**  
17     **of Federal taxes resulting from the open pit mine?**

18          A.     Yes, it is.

19          **Q.     The first column is labeled FICA.**  
20                 **Do you see that?**

21          A.     Yes.

22          **Q.     Are those FICA taxes that fund Social**  
23     **Security and Medicare?**

24          A.     Yeah, those are the employer and employee  
25     contributions to social insurance.



1           **Q.       These numbers aren't numbers that go into**  
2           **the Government's general treasury, right?**

3           A.       Well, Social Security is a major  
4           entitlement program that is part of the Federal  
5           budget so, yes, they are.

6           **Q.       The second column unemployment?**

7           A.       Yeah.

8           **Q.       Those represent the amounts paid for**  
9           **funding Federal unemployment benefits?**

10          A.       Yes.

11          **Q.       The benefits would go, then, to all**  
12          **recipients of unemployment benefits?**

13          A.       Yes.

14          **Q.       The other Federal taxes that Molycorp**  
15          **paid, do they go to various Government benefits and**  
16          **services like highways and national defense?**

17          A.       Would you rephrase that question or state  
18          it again, please.

19          **Q.       The other Federal taxes that Molycorp**  
20          **paid, do they go to funding Government benefits like**  
21          **national defense and highways?**

22          A.       Yeah, that is what all of our tax, that is  
23          what we do when we pay taxes, we are paying for  
24          public goods that the Government provides, like  
25          national defense.

1           **Q.       Molycorp benefited from all of that,**  
2       **correct?**

3           A.       Yeah, as we all do.

4           **Q.       Let's turn to the part of your testimony**  
5       **where you talk about economic benefits created for**  
6       **consumers.**

7           A.       Okay.

8           **Q.       Your opinion is that the Questa Mine**  
9       **created savings for purchasers of molybdenum,**  
10       **correct?**

11          A.       Yes.

12          **Q.       You also say, though, that the Government**  
13       **was not a purchaser of molybdenum, correct?**

14          A.       The main -- not a direct purchaser, but  
15       the main users of molybdenum are ferro and stainless  
16       steel producers. And they produce products that are  
17       bought by General Motors, Caterpillar tractor,  
18       General Dynamics that make submarines and aircraft  
19       carriers. And, again, that is part of the supply  
20       chain and so I think this distinction about, you  
21       know, who buys directly is splitting hairs.

22                 The Government in providing national  
23       defense for everyone, as you have mentioned, has to  
24       buy big capital goods that are made out of steel,  
25       and a lot of those goods, particularly in defense,

1 have molybdenum in them because they have certain  
2 physical properties that are unique to defense  
3 equipment.

4 **Q. The direct purchasers of molybdenum are**  
5 **generally private steel companies, correct?**

6 A. It is my understanding, yes.

7 **Q. Who then sell the steel to many companies,**  
8 **like you said, Caterpillar, other --**

9 A. Thousands of different companies, yes.

10 **Q. Because molybdenum containing steel has a**  
11 **lot of applications in the private industry,**  
12 **correct?**

13 A. Private and defense industries.

14 **Q. In fact, molybdenum containing steel is**  
15 **used in mining equipment, correct?**

16 A. I guess so, I don't know the details. We  
17 have another expert coming up that probably could  
18 speak to that.

19 **Q. Going further down in your direct**  
20 **testimony you say that the Questa open pit mine had**  
21 **a significant impact on molybdenum market prices,**  
22 **correct?**

23 A. The operation of the open pit mine?

24 **Q. Yes.**

25 A. Yes.

1           **Q.     And you do that based on an economic model**  
2           **that you applied in this case?**

3           A.     Right. Simple supply and demand.

4           **Q.     In explaining that motto in your direct**  
5           **testimony, you explained that in a competitive**  
6           **market with many producers, any one producer would**  
7           **not have a significant impact on market prices,**  
8           **correct?**

9           A.     Right, because there would be thousands,  
10          maybe millions of individual firms.

11          **Q.     It is when there is a dominant producer**  
12          **that can charge a monopoly price that your analysis**  
13          **results in finding impacts to market prices?**

14          A.     Well, my analysis applies to both, really  
15          empirically, but the -- you raise a good point about  
16          the unique features of the molybdenum market.

17                 Historically it has been dominated, was  
18          dominated by one firm, Climax. And, in fact, in  
19          1960 Climax produced 85 percent of the molybdenum in  
20          the United States. And there was a concern in the  
21          Department of Justice about the competitive  
22          consequences of that because there are other  
23          examples and other industries where a dominant firm,  
24          like Standard Oil 100 years prior, exerted their  
25          market power and was found to be in violation of

1 antitrust laws.

2 MR. HOSHIJIMA: Let's pull up CX105.

3 Q. (By Mr. Hoshijima) Is this the 1960  
4 report that you were referring to?

5 A. Yes.

6 MR. HOSHIJIMA: Let's go to Page 5.

7 Q. (By Mr. Hoshijima) Do you see in the  
8 second paragraph where it says that, "As of 1960  
9 much of the total supplier of molybdenum comes as a  
10 byproduct of copper and tungsten"?

11 A. Well, I see molybdenum's direct production  
12 is associated with byproducts and much of the total  
13 supply comes as a byproduct of copper and tungsten.

14 Q. Do you understand that to mean that  
15 molybdenum is produced as a byproduct by copper  
16 companies that are mining copper?

17 A. Yes, and that is the structure of the  
18 market. There is a dominant firm, Climax, with a  
19 market share that varies, as I have mentioned, from  
20 a high of 85 to 35, 40 percent.

21 And then there is Questa that is coming in  
22 and out of the market over the decades.

23 And then there is the byproduct producers  
24 of molybdenum who are primarily in the business of  
25 producing copper and tungsten and they respond to

1 incentives in that market, not the molybdenum  
2 market.

3 MR. HOSHIJIMA: Let's take out, let's  
4 remove this magnification. Let's look at the bottom  
5 of the page where it describes Climax, the one  
6 dominant primary producer of molybdenum. That is  
7 what you have been discussing, correct?

8 A. That's correct.

9 Q. The report then goes on to say, though,  
10 that, "Climax's position appears somewhat mitigated  
11 by the emergence of important byproduct production  
12 of molybdenum by copper companies."

13 Is that correct?

14 A. That is correct and it is important and I  
15 would underline somewhat mitigated, that is, to us  
16 and I read that, that there are limitations to that  
17 mitigation.

18 MR. HOSHIJIMA: Let's go two more pages  
19 forward in this report.

20 Q. (By Mr. Hoshijima) Do you see in the  
21 second paragraph where it says that, "From a third  
22 to a half of molybdenum has been produced as a  
23 byproduct of copper and tungsten production"?

24 A. Yes.

25 Q. And that the copper producers, at times

1     **when there is less demand for molybdenum, can skip**  
2     **that byproduct production of molybdenum.**

3                     **Do you see that?**

4             A.     Yes.

5             **Q.     That means on the flip side, do you see**  
6     **where it says, "There is great flexibility in the**  
7     **molybdenum market"?**

8             A.     Yes, I see that.

9             **Q.     So in times of less demand the copper**  
10    **companies might not make as much byproduct**  
11    **molybdenum but conversely when demand increases**  
12    **copper companies can fill that void?**

13            A.     That is what the implication is, I agree  
14    with that. But I might add if, I don't know where  
15    you are going with this, but if you read on in the  
16    document at the very end of the document, I think  
17    this is written by the Attorney General of the  
18    United States. He says that there is some concern  
19    about the competition in the market with such a  
20    dominant producer, so byproduct producers, they kind  
21    of come and go in the market, primarily dependent on  
22    market conditions in their market, not necessarily  
23    molybdenum.

24                    So it is not a guarantee that in times of  
25    lean demand copper producers may omit processing of

1 byproduct molybdenum. It really kind of depends on  
2 what is happening in copper and tungsten because  
3 that is their main line of business.

4 MR. HOSHIJIMA: Let's turn to Page 8 of  
5 this report. PDF Page 11.

6 Q. (By Mr. Hoshijima) This part of the  
7 report further discusses those copper companies that  
8 produce molybdenum as a byproduct, correct?

9 A. Yes.

10 Q. It says that an important source that is  
11 more recently developed as of this 1960 report is  
12 molybdenum bearing copper ores?

13 A. Correct.

14 Q. Further down in that paragraph do you see  
15 how it says that the amount of byproduct production  
16 of molybdenum from copper companies may fluctuate as  
17 a factor of, and one of the factors it lists is the  
18 demand for molybdenum justifying the costs of its  
19 separate extraction?

20 A. I see that.

21 Q. So it is saying that when demand for  
22 molybdenum goes up, that might make it more  
23 worthwhile for some of these copper companies to  
24 produce molybdenum as a byproduct?

25 A. If the level of prices in the copper



1 market justifies the level of copper production.

2 THE COURT: Counsel, would this be a good  
3 time to take our afternoon break?

4 MR. HOSHIJIMA: Yes, Your Honor.

5 THE COURT: Thank you. We will be in  
6 recess for 15 minutes.

7 (A recess was taken.)

8 THE COURT: You may be seated.

9 Q (By Mr. Hoshijima) Dr. Considine, before  
10 the break you recall we were talking about this 1960  
11 Government report, correct?

12 A. Yes, sir.

13 Q. We were talking about the recent  
14 development of molybdenum bearing copper ores?

15 A. You mean the byproduct?

16 Q. Yes.

17 A. Yes.

18 Q. Do you see near the bottom of this page  
19 where it discusses how Kennecott Copper Company is  
20 the largest byproduct producer?

21 A. Yes.

22 Q. You have heard that company name come up a  
23 number of times in this trial, but Kennecott  
24 operates one of the largest open pit mining ventures  
25 in the world, correct?

1           A.       Yes, I see this.

2           **Q.       That is a source for byproduct molybdenum**  
3 **production?**

4           A.       Yes.

5                   MR. HOSHIJIMA: Let's turn to PDF Page 14.

6           **Q.       (By Mr. Hoshijima) Looking at the second**  
7 **paragraph, do you see how, as of 1960 -- and again**  
8 **this is before the start of the open pit mine --**  
9 **this report says that commercially recoverable**  
10 **reserves are estimated as sufficient for 50-year**  
11 **supply?**

12          A.       That is what the passage reads, yes.

13                   MR. HOSHIJIMA: Let's turn to PDF Page 21.

14          **Q.       (By Mr. Hoshijima) Do you see that in**  
15 **1950 there were four companies involved in byproduct**  
16 **production of molybdenum?**

17          A.       Yes, that is what the first sentence  
18 indicates.

19          **Q.       Midway through that paragraph it describes**  
20 **how by the end of that decade there were nine**  
21 **companies doing that, correct?**

22          A.       Correct.

23                   MR. HOSHIJIMA: Turning to PDF Page 33.

24          **Q.       (By Mr. Hoshijima) First paragraph under**  
25 **Competitive Effect, do you see how it says that,**

1     **"Molybdenum byproduct occurrence and copper ores**  
2     **provides a considerable degree of reserve capacity**  
3     **for expended production"?**

4           A.     Yes, that is what it indicates.

5           Q.     That is referring, again, to the idea that  
6     **copper companies could increase their byproduct**  
7     **production of molybdenum if there is demand, right?**

8           A.     It could, but as I cautioned before the  
9     break, there is actually two factors involved in the  
10    supply from byproduct producers of molybdenum. It  
11    would be the price of the main product and the price  
12    of molybdenum.

13          Q.     This 1960 report, after discussing the  
14    byproduct production of molybdenum, says that, "a  
15    **real shortage of molybdenum is unlikely,**" correct?

16          A.     That is what it reads. That is correct.

17               MR. HOSHIJIMA: We can take this document  
18    down.

19          Q.     **(By Mr. Hoshijima) When molybdenum is**  
20    **added to steel, molybdenum is about 1 percent of the**  
21    **ultimate product, right?**

22          A.     I am not a metallurgist, so I can't opine  
23    on that.

24          Q.     **So you don't know how much of molybdenum**  
25    **ends up in the final steel product?**

1           A.       I have done studies on tracking  
2   ferroalloys into alloy and stainless steel  
3   production on tonnage basis, but I don't know, you  
4   know, the percent contents off the top of my head.

5           **Q.       The analysis you did for your direct**  
6   **testimony was about the impact of the Questa Mine on**  
7   **the market prices of molybdenum, right?**

8           A.       That is right, molybdenum concentrate.

9           **Q.       You did not analyze how much the Questa**  
10   **Mine production would have affected the price of**  
11   **steel?**

12          A.       No, I didn't look at that.

13          **Q.       The purchasers of molybdenum, again, were**  
14   **private steel companies, right?**

15          A.       For the most part. There are many  
16   different uses, chemicals and other nondurable  
17   products use molybdenum powders, and so on. I  
18   didn't really do a detailed end use analysis in my  
19   report, I just looked at the market for molybdenum  
20   concentrate and the impacts that the stockpile sales  
21   and Questa production had on the price.

22          **Q.       That price reduction would have gone to**  
23   **the benefit of the private steel companies, right?**

24          A.       As I have mentioned before, that is  
25   correct, that would lower the cost of producing

1 goods, primarily capital goods that contain  
2 molybdenum bearing steel.

3 **Q. If it were the case that molybdenum makes**  
4 **up about 1 percent of steel, does that mean that the**  
5 **price impacts would not really be felt by the**  
6 **consumers of steel?**

7 A. Well, I compute the consumer cost savings  
8 from lower molybdenum prices from -- that results  
9 from the Questa production and those numbers are  
10 reported in the report. And they amount to hundreds  
11 of millions, billions of dollars over the entire  
12 mining period, so they are worthy to take note.  
13 Granted they are a small fraction of the overall  
14 economy and overall steel use, but every little bit  
15 helps.

16 **Q. In your direct testimony you describe the**  
17 **Federal Government's stockpile of molybdenum,**  
18 **correct?**

19 A. Yes.

20 MR. HOSHIJIMA: Let's turn to Page 42 of  
21 your testimony.

22 **Q. (By Mr. Hoshijima) You say that, "Because**  
23 **Questa represented a new and significant source of**  
24 **molybdenum, Questa reduced the United States**  
25 **Government's need for the strategic stockpile"?**

1           A.       Yes, I noted that the United States sold  
2       27.6 million pounds of molybdenum from the strategic  
3       stockpile just prior to the startup of the Questa  
4       open pit mine.

5           **Q.       When you referred to the new and**  
6       **significant sources of molybdenum, you are talking**  
7       **about the open pit mine starting in 1965, right?**

8           A.       Yes.

9           **Q.       Your opinion is that that open pit mine is**  
10       **what allowed the Government to start selling**  
11       **molybdenum from the stockpile?**

12          A.       I pointed that out and, you know, there  
13       are a lot of -- any economic decision made by the  
14       Government or market entails many factors, and this  
15       could have been one of them because it was  
16       significant because Questa was a primary producer.

17               All of the other, there was Climax as a  
18       primary producer, now the United States had another  
19       second significant primary producer producing  
20       roughly 10 percent of the market of total  
21       production, and then the byproduct producers,  
22       further diversifying and adding to the flexibility  
23       in the market, which I think is a good thing.

24               MR. HOSHIJIMA: Let's turn to USX053 on  
25       Page 134. This exhibit has been previously

1 admitted.

2 Q. (By Mr. Hoshijima) Do you see that it  
3 represents the national stockpile goals plotted  
4 against their inventories?

5 A. Yes, the inventory levels are the Xs and  
6 the goals are the plus signs.

7 Q. This is for molybdenum disulfide?

8 A. Yes.

9 Q. Do you see that it is about 1958 that the  
10 inventories, which again are shown with the plus  
11 marks, are -- sorry, strike that.

12 Do you see that it is about 1958 when the  
13 inventories, which are represented by the X mark,  
14 meets the goal for the stockpiling of molybdenum?

15 A. Yeah, they may be a few years earlier it  
16 intersects at that point.

17 Q. Certainly years before Molycorp opened the  
18 open pit mine, correct?

19 A. Yeah, I think it is important to keep in  
20 mind what else was happening at the period. And if  
21 you look at Climax production in particular during  
22 the 1950s, it increased dramatically.

23 Q. So Climax's production, not the Questa  
24 open pit mine, is what allowed the Government to  
25 meet its stockpile goals?

1           A.       I didn't say that. I think it is a  
2     contributing factor. There are a lot of other  
3     factors in the management of the stockpile. It is  
4     not just the supply, but the anticipated demand and  
5     the probability. The whole point of owning a  
6     stockpile, and this is what the Defense Department  
7     and other Government agencies do, is they, they war  
8     game it, you know. They think, okay, what happens  
9     if we fight, for instance, World War III, which was  
10    a real concern at this time, how much material would  
11    we need. So the demand in both the supply side  
12    considerations are, I think, likely taken into  
13    account.

14           **Q.       Even if a lot of factors are taken into**  
15    **account, how could it be that the Questa open pit**  
16    **mine production is one of those factors if 1958 is**  
17    **before the DMEA even certifies a discovery?**

18           A.       Well, I think it is just the simple idea  
19    that Government concerned about the availability of  
20    materials keeps in mind that there -- they are  
21    trying to develop a diverse portfolio of assets and  
22    Questa would fit into that strategy.

23                   MR. HOSHIJIMA: Let's look at USX081,  
24    which has been previously admitted.

25           **Q.       (By Mr. Hoshijima) Do you see this as a**



1       **January to June 1956 stockpile report to Congress?**

2           A.       Yes, yes.

3           MR. HOSHIJIMA:   Let's turn to Page 24.

4           **Q.       (By Mr. Hoshijima)   There is a section on**  
5       **molybdenum on the top left of the page.**

6           **Do you see that?**

7           A.       Yes.

8           **Q.       Again, this is in a 1956 report.   Do you**  
9       **see how, because of an improved defense position for**  
10       **molybdenum, the Government actually instead of**  
11       **receiving deliveries to the stockpile deferred them**  
12       **to private industry?**

13          A.       I see those words, yes.

14          **Q.       1956, which is nearly ten years before**  
15       **open pit production, the Government no longer needs**  
16       **these deliveries to the stockpile, correct?**

17          A.       Well, the future is important to consider,  
18       but the past is as well.   And the thing to keep in  
19       mind here is the United States just finished  
20       fighting the Korean War and there were major  
21       problems in the steel industry.   And maybe some of  
22       those problems have -- were resolved at this time.

23                So I would ask, and I am not sure here,  
24       what the improved defense position for molybdenum  
25       actually is.   It is not really explained here.

1           **Q.       Whatever it is, though, it doesn't have**  
2           **anything to do with what Molycorp is doing in**  
3           **Questa, right?**

4           A.       Well, when was this, in '56, this  
5           document?

6           **Q.       Yes.**

7           A.       Well, like I said, you know, this is part  
8           of what stockpiling programs do is they try to look  
9           around the world for sources of supply in  
10          anticipation of future demand. And for this  
11          particular material, that defense scenario would  
12          play prominently.

13          **Q.       This document near the end of this**  
14          **paragraph notes, "The capacity of domestic producers**  
15          **in Colorado and Arizona," when it talks about the**  
16          **stockpile being met, right?**

17          A.       Well, it is just saying that capacity of  
18          domestic producers in Colorado and Arizona is being  
19          increased, presumably. Well, that is the byproduct  
20          producers part of this diversified portfolio.

21          **Q.       No mention in this paragraph of production**  
22          **in Questa, New Mexico, that would allow the**  
23          **Government to defer deliveries to the stockpile,**  
24          **right?**

25          A.       Right. This is 1956 and what the DMEA

1 loan really started, I guess, they started work in  
2 '57, so this is before then, yeah.

3 **Q. This is before the DMEA contract is even**  
4 **signed, correct?**

5 A. Yeah.

6 MR. HOSHIJIMA: Let's pull up USX539.  
7 This has been previously admitted.

8 **Q. (By Mr. Hoshijima) Do you see that it is**  
9 **the January to June 1957 stockpile report?**

10 A. I do.

11 MR. HOSHIJIMA: Let's turn to Page 10.

12 THE COURT: Counsel, can I inquire as to  
13 where you are going with this year by year hour per  
14 hour? It seems irrelevant to what we are here for.

15 MR. HOSHIJIMA: This is one more document  
16 about the state of molybdenum in the United States  
17 when Molycorp is seeking the DMEA loan.

18 THE COURT: Well, so what?

19 MR. HOSHIJIMA: Chevron is arguing that  
20 the Government had a significant defense interest in  
21 molybdenum at that point in time.

22 THE COURT: Well, there was a comment  
23 there. I think it has been covered over and over  
24 again.

25 MR. HOSHIJIMA: I will move on.

1           **Q        (By Mr. Hoshijima) The Government**  
2           **eventually sold off excess molybdenum from the**  
3           **national stockpile, right?**

4           A.       Yes.

5           **Q.        We saw that it was in 1958 when its**  
6           **inventory was met?**

7           A.       Well, that is where the goals intersected  
8           with the inventory levels.

9           **Q.        When the goals were met?**

10          A.       Yeah.

11          **Q.        But it is actually not until 1975 that the**  
12          **last bit of molybdenum is sold off from the**  
13          **stockpile, right?**

14          A.       That is what the historical record  
15          indicates, yes.

16          **Q.        That is because the Government took its**  
17          **time to make those sales so it didn't flood the**  
18          **market, correct?**

19          A.       Yeah, that is always a concern with the  
20          drawdown of a stockpile.

21          **Q.        The Government --**

22          A.       Unless it is intended, for instance, for  
23          example in the case of oil.

24          **Q.        To avoid disrupting the market, then, the**  
25          **Government, even after the stockpile inventory goal**

1     **had been met, took its time releasing molybdenum**  
2     **from the stockpile, right?**

3           A.     Well, that wasn't really a focus of my  
4     analysis. I just took the numbers as they were to  
5     make a judgment call of whether that was the best  
6     route, I don't know, I can't really make that  
7     judgment.

8           **Q.     Final topic, then, you discuss sales of**  
9     **molybdenum from the stockpile in your direct**  
10    **testimony, correct?**

11          A.     Yes.

12          **Q.     Are you aware that Molycorp was a**  
13    **purchaser of molybdenum from the national stockpile?**

14          A.     I believe so. It is not clear to me, but  
15    I will grant you that.

16                   MR. HOSHIJIMA: Let's pull up USX098.  
17    This has been previously admitted.

18          **Q.     (By Mr. Hoshijima) Do you see this is a**  
19    **1964 GSA news release?**

20          A.     I do.

21          **Q.     Do you see that Molycorp has bid for sale**  
22    **of molybdenum from the stockpile?**

23          A.     That is what it indicates, yes.

24          **Q.     Molycorp was awarded a bid, right?**

25          A.     Yeah, awards went to three bidders and

1     there they are.

2           **Q.     Molycorp then benefited from sales of**  
3     **molybdenum from the stockpile, right?**

4           A.     Behind every side of the sale there are  
5     two winners, the seller and the buyer. Yeah, they  
6     were probably buying this molybdenum to hoist in  
7     there processing facilities.

8           MR. HOSHIJIMA: USX103, please. This has  
9     been previously admitted.

10          **Q.     (By Mr. Hoshijima) Do you see it is a**  
11     **1969 GSA news release?**

12          A.     Yes.

13          **Q.     Do you see that again in 1969 Molycorp is**  
14     **purchasing molybdenum from the national stockpile?**

15          A.     Yes. And I interpret this as just the  
16     likely fact that they had excess capacity to process  
17     molybdenum and they saw it in their best interest to  
18     pursue this opportunity.

19          **Q.     And the Government didn't need it at that**  
20     **time, right?**

21          A.     Well, that is implied. They are selling  
22     it, so if you sell something you want to get rid of  
23     it, yes.

24          MR. HOSHIJIMA: I have no further  
25     questions.

1 THE COURT: Thank you. You may redirect.

2 MR. HOPSON: Yes, Your Honor.

3 Good afternoon, Your Honor.

4 THE COURT: Good afternoon.

5 REDIRECT EXAMINATION

6 BY MR. HOPSON:

7 Q. You are currently an economist at the  
8 School of Energy Resources at the University of  
9 Wyoming, right?

10 A. Yes.

11 Q. And prior to that time you spent some time  
12 at Penn State focusing on mineral economics, right?

13 A. That's correct.

14 Q. So are you familiar with issues around  
15 valuing, evaluating and seeking mine financing?

16 A. Somewhat. I don't have direct experience  
17 in that, but, yeah, I have rubbed elbows with a lot  
18 of people who have written programs that support  
19 that activity.

20 Q. I believe you said that when you did your  
21 analysis you used before-tax cash flow for a reason.

22 What was the reason?

23 A. The reason is that it is considered the  
24 gold standard of mineral project evaluation and it  
25 strips away all the complexities and distortions of

1 the tax code. So you really want to make your  
2 investment decision based on the cash generating  
3 capability of the project.

4 MR. HOPSON: We saw, and I am going to ask  
5 Ms. Hutchman to put up Chevron Exhibit 123, which is  
6 the 1963 annual report.

7 Q. (By Mr. Hopson) Do you remember looking  
8 at that?

9 A. Yeah.

10 Q. Let me see if I can do it without the  
11 document, make it quicker.

12 A. Okay.

13 Q. You were shown some information that  
14 suggested that the benefits of the tax deduction  
15 were substantial in one year, that is, the tax  
16 deduction for capital appreciation to Questa, yes?

17 A. Yes.

18 Q. Have you seen that for any other year  
19 during the operation of the mine?

20 A. I did not.

21 Q. You are familiar as an economist with the  
22 timeline of what happened at the Questa Mine,  
23 correct?

24 A. Yes.

25 Q. And in December of 1956 at the time that



1     **Molycorp was applying for assistance from the**  
2     **United States Government, what was the state of**  
3     **their reserves?**

4           A.     They were essentially tapped out of  
5     molybdenum at the Questa site.

6           **Q.     Were they in production?**

7           A.     No. I believe they shut down somewhere,  
8     sometime in 1956 or '57.

9           **Q.     Did they have any planned exploration?**

10          A.     No. In fact, one document indicated  
11     explicitly that they had no plans to conduct further  
12     exploration.

13          **Q.     In your experience with mine financing and**  
14     **mineral economics, is it likely a private lender,**  
15     **like a bank, would have loaned money for exploration**  
16     **at the Questa site given the mineral economics on**  
17     **the ground?**

18          A.     I think it would be unlikely because  
19     there -- it was basically a tapped out operation.  
20     It was a small play that was played. And unless  
21     there was something else that attracted attention,  
22     then it would probably be passed upon.

23          **Q.     There were questions you were asked about**  
24     **whether it was risky to take out bank loans.**

25                   **Do you remember those risk questions?**

1           A.       I do.

2           **Q.       Was it risky to lend to Molycorp once they**  
3           **had in hand a DMEA certification of mineral**  
4           **discovery?**

5           A.       That really impressed me because I looked  
6           at that document and there was a big number. I  
7           think it was 2 billion pounds of possible reserves.  
8           And based on my experience in risk evaluation, one  
9           of the key elements of risk is whether a resource is  
10          there or not. And just the fact that someone with  
11          credibility like the USGS or the DMEA loan people  
12          saying, yes, there is a resource here and it is  
13          significant would immediately lower that risk  
14          premium that people subjectively put on any  
15          investment.

16          **Q.       Particularly investments in minerals**  
17          **exploration?**

18          A.       Yes.

19                 MR. HOPSON: Let's look, Ms. Hutchman, at  
20          US Exhibit 519.

21          **Q.       (By Mr. Hopson) And looking at the first**  
22          **page here you will see this is a report to**  
23          **stockholders of Molycorp for the year ended**  
24          **December 31, 1955, correct?**

25          A.       Correct.

1           Q.     And if you flip over a couple of pages you  
2     see that this is actually issued on March 1, 1956,  
3     correct?

4           A.     Correct.

5           Q.     Now, you were asked questions about this  
6     document and particularly asked questions about the  
7     balance sheet.

8                     Do you recall that?

9           A.     Yes.

10                    MR. HOPSON: Let's go to Page 6.

11           Q.     (By Mr. Hopson) This was a page you were  
12     asked questions about.

13                     Do you recall that?

14           A.     I do.

15           Q.     Now to start with this is a consolidated  
16     balance sheet, correct?

17           A.     Correct.

18           Q.     So it includes not only the Questa Mine  
19     but all of the rest of Molycorp's businesses,  
20     correct?

21           A.     That's correct.

22           Q.     You were pointed to the line in the  
23     balance sheet that said that Molycorp had at that  
24     moment in time \$3.150 million in cash, correct?

25           A.     Correct.

1           Q.       Does that mean to you, Dr. Considine, that  
2       Molycorp has \$3.1 million to invest in exploration  
3       at the Questa Mine?

4           A.       No, it doesn't.

5                   MR. HOPSON: Let's flip to the next page.

6           Q.       (By Mr. Hopson) Can you tell me,  
7       Dr. Considine, what their current liabilities were  
8       at the time they had \$3.1 million in cash?

9           A.       About 3.7 million.

10          Q.       So Molycorp wasn't exactly cash rich at  
11       that moment in time?

12          A.       No. In fact, in my report I compare rates  
13       of return before and after the '56, '57 period and  
14       it was a clear break in the trend. And, you know,  
15       it is almost two-thirds lower after the depletion of  
16       the Questa mine.

17          Q.       I'm sorry, I probably just doesn't catch  
18       that. What was two-thirds lower?

19          A.       The return on assets.

20          Q.       Okay.

21                   MR. HOPSON: Ms. Hutchman, let's look at  
22       US Exhibit 3.

23          Q.       (By Mr. Hopson) Again, I am not going to  
24       go through everything you were shown in this, but do  
25       you recall looking at this SEC register statement

1     and being asked if the company had obtained  
2     financing in 1954 and 1955?

3           A.     Yes, I recall.

4           Q.     And was that consolidated corporate  
5     financing or was it specific to Questa?

6           A.     I believe it was consolidated.

7           Q.     And, again, back to your familiarity with  
8     mine financing, is raising money for a consolidated  
9     corporation a different process than raising money  
10    specifically to explore for a mineral at a specific  
11    cite?

12          A.     Yes. There is a lot more exacting  
13    information that is required for a specific site.

14          Q.     What kind of exacting information, sir?

15          A.     Oh, such as the location, the mineral, the  
16    amount of mineral that could be recovered, estimated  
17    costs, transportation infrastructure to the site,  
18    et cetera.

19          Q.     Just one question I want to ask you about  
20    US Exhibit 481.

21                 You were asked the question about the  
22    statement that says to date a total of \$110 million  
23    has been invested.

24                 Let me ask you, do you know what time  
25    period that refers to?

1           A.       I do not.

2           **Q.       Is there anything else in this document**  
3           **that indicates that?**

4           A.       I read it, I couldn't figure it out.

5                   MR. HOPSON: We can put that document  
6           aside.

7           **Q       (By Mr. Hopson) I want to talk a little bit**  
8           **about the Attorney General's report to Congress**  
9           **dated May 27, 1960, which is in evidence as**  
10          **Chevron 105.**

11                   Are you familiar with that document,  
12          **Dr. Considine?**

13          A.       Yes, I am.

14          **Q.       To begin with, this is a report to**  
15          **Congress by the Attorney General of the**  
16          **United States that solely focused on the molybdenum**  
17          **market and molybdenum industry, correct?**

18          A.       Correct.

19          **Q.       Does that suggest to you that the United**  
20          **States Government believes that molybdenum is**  
21          **important in 1960?**

22          A.       Yes. It is the Attorney General of the  
23          United States picking out one material among many.  
24          It is significant.

25          **Q.       Let's look -- I am having a hard time**

1 reading the number at the bottom of the page, but I  
2 believe it is Page 13 to 43, it is actually Page 10  
3 in the original report.

4 You were asked quite a few questions about  
5 whether there was molybdenum supply as a byproduct  
6 of copper production.

7 Do you recall those?

8 A. Yes, I do.

9 Q. Can you look at Table Number 1 and tell us  
10 generally the trend for byproduct production from  
11 1950 through 1959?

12 A. From byproduct ore?

13 Q. Yes, by product ore.

14 A. Just eyeballing I don't see a trend, it is  
15 up and down, rather zigzag pattern.

16 Q. Do you know whether there was a strike at  
17 the Climax mine in 1958?

18 A. Yes, I did see an oblique mention of that.

19 Q. If you exclude 1958 do you see a trend?

20 A. Yes. Climax was increasing production  
21 significantly.

22 MR. HOPSON: I would like to ask us to  
23 turn to Page 31 in the original report, which I  
24 believe is Page 34 of the document itself.

25 Q. (By Mr. Hopson) Now, you have read the

1     **report before, correct?**

2           A.     Yes.

3           MR. HOPSON: In the middle paragraph, if  
4 we could call that out.

5           Q.     **(By Mr. Hopson) The Attorney General**  
6 **reports that in 1950, direct production came from**  
7 **only two firms, one clearly dominant. Who are the**  
8 **two firms?**

9           A.     Climax and Questa.

10          Q.     **And which is the dominant one?**

11          A.     Climax.

12          Q.     **You referenced, I don't know exactly how**  
13 **you put it, but potential antitrust concerns,**  
14 **competition concerns by having a dominant firm.**

15                 **Do you recall that testimony?**

16          A.     I do.

17          Q.     **Look at the last sentence of that**  
18 **paragraph, which reads, "But the existence of a**  
19 **single primary producer of an important metal**  
20 **necessarily occasions some uneasiness and doubts are**  
21 **increased by concern for competition in associated**  
22 **nonferrous metal production."**

23                 **Does that statement by the Attorney**  
24 **General relate to your expressed concern about a**  
25 **dominant role for Climax in the molybdenum market?**



1           A.       Yes, it does, very much so. And this is  
2       why I have mentioned in my testimony that one of the  
3       motivations or considerations in the stockpile and  
4       also the DMEA loan is this competitive balance in  
5       the molybdenum market. And the need for the  
6       Government and particular the steel firms who are  
7       producing these vital materials for defense to have  
8       a diversified source of supply and some sway over  
9       the price, some negotiating power over the price as  
10      opposed to being at the whims of a single producer.

11           **Q.       And when we look at this market overall is**  
12      **the byproduct supply a reliable or stable one as you**  
13      **look at the market?**

14           A.       No. I see that there are many other  
15      factors that, besides the price of molybdenum, that  
16      affects the source of byproduct molybdenum supply in  
17      particular the price of copper and tungsten, that  
18      may not necessarily move with molybdenum prices.

19           **Q.       Okay. If we could turn back to Page 30 of**  
20      **the report, which again appears to be Page 33 of the**  
21      **exhibit. I just want to show you and you can look**  
22      **at it in your binder if you want to, that the last**  
23      **few pages of this report the Attorney General is**  
24      **addressing competitive effects; is that correct?**

25           A.       That's correct.

1           **Q.       He is noting both negative and potentially**  
2           **positive competitive effects, correct?**

3           A.       Yes, yes.

4                   MR. HOPSON: Could we turn to Page 32,  
5           which is Page 35 of the exhibit, and could you  
6           highlight the first complete sentence on that page.

7           **Q.       (By Mr. Hopson) Would you read that for**  
8           **me, Dr. Considine?**

9           A.       "And when the Molybdenum Corporation of  
10          America's mine exhausted its main ore resources,  
11          defense production assistance was granted to enable  
12          it to explore new ore sources."

13          **Q.       So the Attorney General believed that the**  
14          **DMEA program enabled Molycorp to find new ore**  
15          **sources?**

16          A.       Yes.

17          **Q.       And the Attorney General reported that as**  
18          **a favorable development in the competitive market?**

19          A.       Yes.

20          **Q.       I am not going to pull out a lot of these**  
21          **documents, but you were asked a number of questions**  
22          **that to me sounded like they were suggesting that**  
23          **molybdenum was not really that important.**

24                   **Do you remember those questions?**

25          A.       Yes, yes.

1           **Q.       Was molybdenum on the stockpile list all**  
2           **the way through 1970?**

3           A.       Yes, it was stockpiled and then there was  
4           positive levels of the stockpile until 1957.

5           **Q.       Positive levels meaning molybdenum**  
6           **remained in the stockpile?**

7           A.       Yeah. There was a stockpile of molybdenum  
8           until 1975.

9           **Q.       And was Molycorp listed as a strategic**  
10          **mineral critical for national defense throughout**  
11          **that time period?**

12          A.       Yes, my understanding.

13                 MR. HOPSON: If we could just call up the  
14          front page of US Exhibit 81.

15          **Q.       (By Mr. Hopson) Do you recall looking at**  
16          **this document with a bunch of questions suggesting**  
17          **that there were plenty, there is plenty of**  
18          **molybdenum around?**

19          A.       Yes.

20          **Q.       And what is the date of this stockpile**  
21          **report?**

22          A.       January to June '56, 1956.

23          **Q.       We know something, though, about the**  
24          **U.S.'s view about molybdenum because the U.S. went**  
25          **forward with the DMEA contract at Questa Mine after**

1     **this report, right?**

2           A.     Correct.

3           MR. HOPSON:   Let's look at Chevron  
4     Exhibit 48, please.

5           Q.     **(By Mr. Hopson) This is, if you don't**  
6     **recall, it is a collection of internal**  
7     **correspondence and memoranda between and among**  
8     **various Government officials.**

9           Do you recall looking at this?

10          A.     Not in detail, I just scanned it.

11          Q.     **Well, let me just call your attention to**  
12     **Page 10 of 10 of the exhibit.**

13          A.     Okay.

14          Q.     **This is after the stockpile report, right?**

15          A.     Right, December 12, 1956.

16          Q.     **This is a memorandum from a fellow who is**  
17     **a commodity specialist in the Branch of Ferrous**  
18     **Metals and Ferroalloys to the Chief of the Rare and**  
19     **Miscellaneous Metal Division in the DMEA, right?**

20          A.     Correct.

21          MR. HOSHIJIMA:   And if you highlight the  
22     last full paragraph, the full sentence.

23          Q.     **(By Mr. Hopson) It suggests what the**  
24     **United States really thinks about the importance of**  
25     **molybdenum at this point.**

1                   He states, "The strategic importance of  
2   molybdenum and the limited noncommercial deposits  
3   makes it highly desirable, in my opinion, to  
4   endeavor to increase known reserves whenever  
5   feasible."

6                   Did I read that correctly?

7           A.     You sure did.

8           Q.     And was this desire to increase the supply  
9   of molybdenum, and particularly to support a second  
10   primary producer the reason the United States  
11   entered into the DMEA contract?

12          A.     It is probably an overarching  
13   consideration in that decision, very important.

14                  MR. HOPSON: I have no further questions,  
15   Your Honor.

16                  THE COURT: This witness can be excused.  
17                       (Whereupon, the witness was excused.)

18                  THE COURT: Do we have one short witness,  
19   maybe a 10-minute witness?

20                  MR. TODD: I believe we do, Your Honor,  
21   but may I deal with a couple of housekeeping matters  
22   first just to explain where we are in the cadence of  
23   the trial.

24                  First, a couple of non-witness evidentiary  
25   issues. We have referred a few times to the two

1 stipulations that were previously entered with the  
2 Court's record on the Court's docket. Those are  
3 Dockets 160 and 158.

4 As those are evidentiary stipulations, we  
5 would like to move them into evidence as part of the  
6 hearing record.

7 THE COURT: Okay. Any objections?

8 MR. KIMBALL: No objection.

9 THE COURT: Without objections they will  
10 be so admitted.

11 (Exhibits admitted, Court's Docket 160 and  
12 158.)

13 MR. TODD: Thank you, Your Honor.

14 Secondly, there was another stipulation  
15 agreement between the parties that was not docketed  
16 and that -- but it is memorialized in an e-mail and  
17 that relates to the question of response costs. An  
18 element of an allocation action as the party  
19 bringing it has to prove that they have incurred at  
20 least some response costs, i.e., clean-up costs.

21 And the Government has kindly agreed that  
22 we can stipulate that Chevron has incurred some  
23 costs without having to bring a witness in to  
24 testify to all of that money.

25 So with the Government's agreement, I

1 would like to just make that clear on the record.

2 MR. KIMBALL: No objection.

3 THE COURT: Very good. So stipulated.

4 MR. TODD: Thank you, Your Honor.

5 Thirdly, in Docket Number 223, which is  
6 when Chevron tendered its affirmative case to the  
7 Court, we identified a number of discovery responses  
8 that we wanted to offer.

9 As the Court knows a party's responses in  
10 discovery are party admissions and admissible  
11 without a witness. I was going to offer those, but  
12 I understand from Ms. Kimball that the Government  
13 wants to stand on some of the objections within  
14 those responses. So rather than offer them now, I  
15 would like to hold the record open so we can  
16 hopefully resolve those and minimize what the Court  
17 will have to look at.

18 THE COURT: Very good.

19 MR. TODD: Thank you, Your Honor.

20 With respect to witnesses, Your Honor,  
21 Chevron has two more witnesses but neither of whom  
22 we can call right now.

23 You may recall from the January status  
24 conference that Bob Cryderman, who is an expert in  
25 molybdenum couldn't be here in the early part of the

1 week because he was at an academic conference. We  
2 hope he is coming tomorrow and we had agreed  
3 previously he would testify Thursday. We will get  
4 him on in the Government's -- as part of the  
5 Government's case, our case, but in the middle of  
6 their case once he is here.

7 And secondly, I mentioned Dr. Haddad whose  
8 mother had the stroke. We just need to agree on a  
9 date and a format for doing his cross-examination.  
10 We can discuss that now, I am happy to discuss that  
11 whenever Your Honor would like.

12 THE COURT: Yeah, without knowing his  
13 particular status and I sort of know my status, like  
14 I am gone next week. We will have to just wait and  
15 see how it shakes out and we will make every effort  
16 to accommodate both parties. I know you would like  
17 to stay back east where it is more civilized than  
18 out here.

19 MR. TODD: I would dispute that,  
20 Your Honor. Dr. Haddad has great flexibility, he  
21 simply doesn't want to leave Los Angeles while his  
22 mother is in this condition. If we could do it  
23 remotely he could probably do it any day, I  
24 shouldn't say any, that's overreaching. Most days  
25 when the Court could do it.



1           So perhaps if Your Honor identifies dates,  
2   maybe put aside a half day. I am not sure it would  
3   even take that long. If you give us dates, then we  
4   could work around those.

5           THE COURT: So you assume that we will  
6   Zoom him?

7           MR. TODD: If you are willing to do Zoom  
8   and I know the Government would prefer to do it in  
9   person.

10          THE COURT: Yeah, I am willing. We can do  
11   it from Santa Fe, too.

12          MR. AUGUSTINI: May I be heard briefly,  
13   Your Honor, if you are done, Counsel?

14          MR. TODD: Please.

15          MR. AUGUSTINI: Yes, Your Honor. Our  
16   strong preference is to conduct live  
17   cross-examination. I am happy to come back to  
18   New Mexico, to Santa Fe if it is convenient for you.  
19   We will accommodate Dr. Haddad's schedule, obviously  
20   we understand their personal circumstances.

21          So in terms of agreeing on a date, we will  
22   work with Chevron on that, but we do prefer live  
23   cross-examination. We just think it is just better  
24   overall.

25          THE COURT: It probably is.

1 MR. AUGUSTINI: Thank you, Your Honor.

2 MR. TODD: I am sure we are all happy to  
3 do it in Santa Fe. Your Honor, honestly, if we were  
4 thinking, we would have done this whole trial in  
5 Santa Fe. I apologize on behalf of both parties for  
6 not suggesting that.

7 THE COURT: That is all right.

8 MR. TODD: The last issue, Your Honor, a  
9 moment of personal privilege, we are now going to  
10 hand the case over to the Government to call their  
11 first witness, Ms. Sitton, who I believe we can get  
12 up and down very quickly today.

13 But before I do that any efficient  
14 courtroom presentation doesn't rely on the folks at  
15 the podium, it is the folks in the back doing the  
16 work. I just wanted to introduce on the record  
17 Alexia Jansen, Matt Simpson and Deesha Shah, a  
18 couple of associates and a paralegal with my firm  
19 who have put in some tireless nights here.

20 THE COURT: Welcome.

21 MR. TODD: Thank you, Your Honor.

22 THE COURT: Now it is 4:00. Do you really  
23 need to put this witness on today?

24 MR. AUGUSTINI: No, actually I am afraid  
25 that we would interrupt your trip back to Santa Fe

1 if we tried to, and I don't know how much cross  
2 Chevron has but, I may have some redirect. So we  
3 are happy to start first thing in the morning,  
4 whatever time the Court prefers.

5 THE COURT: I would prefer to do that if  
6 it is not a big inconvenience.

7 MR. AUGUSTINI: Whatever time Your Honor  
8 would like. We are happy to start earlier.

9 THE COURT: We can start at 9:00.  
10 Tomorrow I have got a sentencing at 4:00 in another  
11 courtroom and on another case. Not one of you  
12 people, so we will be in recess, then, until 9:00  
13 tomorrow morning.

14 Thank you.

15 (Proceedings concluded at 3:58 p.m.)  
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REPORTER'S CERTIFICATE

I certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter. I further certify that the transcript fees and format comply with those prescribed by the Court and the Judicial Conference of the United States.

Date: March 15, 2022

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